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Introduction to the Cisco Kinetic for Cities Dashboard User Guide

Cisco Kinetic for Cities brings network-based control and automation to city infrastructure features, such as, street lights, traffic lights, parking sensors, and video cameras. A Web-based graphical user interface provides easy access to CKC in real time.

This document, the Cisco Kinetic for Cities Dashboard User Guide, describes how a user in the Operator role can interact with the Cisco Kinetic for Cities user interface (UI) to perform the following tasks:

- Define and manage policies that automate the behavior of Cisco Kinetic for Cities Platform.
- Monitor infrastructure-generated data in real time, responding to specific incidents as necessary using system-provided workflows.
- Generate custom reports that describe system usage and trends for specific locations and time periods.

How To Use This Guide

Read this document before you begin using the Cisco Kinetic for Cities web UI in the Operator role. You may also refer back to this document as necessary to perform day-to-day tasks in the UI.

1 All future references to CKC in the document refers to Cisco Kinetic for Cities.
Audience

This Guide is for Operator users who interact with the Cisco Kinetic for Cities dashboard web GUI to manage or monitor the platform. An Administrator user can also perform any task that this Guide describes, but this Guide does not describe tasks that only an Administrator can perform. An Enforcement Officer user may not be able to perform all the tasks that this Guide describes. An Enforcement Officer may not be able to access all areas of the web GUI that this Guide describes.

Document Conventions

This document uses the following conventions:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>^ or Ctrl</td>
<td>Both the ^ symbol and Ctrl represent the Control (Ctrl) key on a keyboard. For example, the key combination ^D or Ctrl-D means that you hold down the Control key while you press the D key. (Keys are indicated in capital letters but are not case sensitive.)</td>
</tr>
<tr>
<td><strong>bold</strong> font</td>
<td>Commands and keywords and user-entered text appear in <strong>bold</strong> font.</td>
</tr>
<tr>
<td><em>Italic</em> font</td>
<td>Document titles, new or emphasized terms, and arguments for which you supply values are in <em>italic</em> font.</td>
</tr>
<tr>
<td><strong>Courier</strong> font</td>
<td>Terminal sessions and information the system displays appear in <strong>Courier</strong> font.</td>
</tr>
<tr>
<td><strong>Bold Courier</strong> font</td>
<td><strong>Bold Courier</strong> font indicates text that the user must enter.</td>
</tr>
<tr>
<td>[x]</td>
<td>Elements in square brackets are optional.</td>
</tr>
<tr>
<td>...</td>
<td>An ellipsis (three consecutive nonbolded periods without spaces) after a syntax element indicates that the element can be repeated.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>[x</td>
<td>y]</td>
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<td>{x</td>
<td>y}</td>
</tr>
<tr>
<td>[x {y</td>
<td>z}]</td>
</tr>
<tr>
<td>string</td>
<td>A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.</td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td>Nonprinting characters such as passwords are in angle brackets.</td>
</tr>
<tr>
<td>[ ]</td>
<td>Default responses to system prompts are in square brackets.</td>
</tr>
</tbody>
</table>
Description Convention

An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

Reader Alert Conventions

This document may use the following conventions for reader alerts:

Note

Means reader take note. Notes contain helpful suggestions or references to material not covered in the manual.

Tip

Means the following information will help you solve a problem.

Caution

Means reader be careful. In this situation, you might do something that could result in equipment damage or loss of data.

Timesaver

Means the described action saves time. You can save time by performing the action described in the paragraph.

Warning

IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071

SAVE THESE INSTRUCTIONS

Related Documentation

Not Applicable

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see What's New in Cisco Product Documentation.

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the . RSS feeds are a free service.
 Obtaining Documentation and Submitting a Service Request
What is Cisco Kinetic for Cities Platform?

The Cisco Kinetic for Cities is an open, extensible city data platform that integrates solutions, applications, and devices to help communities enrich constituent engagement, gather and share data more efficiently, and generate new revenue and job opportunities.

The Cisco Kinetic for Cities Platform is an application-enabled platform that helps improve service delivery to communities and their constituents. The platform aggregates and organizes data from city infrastructure sensors and other data sources in a consistent, easy-to-use format and optimizes services delivery to engage residents and improve overall quality of life.

CKC brings network-based control and automation to city infrastructure features, such as street lights, traffic lights, parking sensors, and video cameras.

Although platform features can be controlled manually from the user interface, their operation is most often automated by means of policies. For example, an operator might define a policy which automatically increases street lighting to enhance safety when occupancy increases or dims lights to save energy when occupancy drops beneath a specific threshold.

Underpinning this automation is a continuous flow of data from infrastructure features. Parking sensors send notifications of occupancy or vacancy. Lights notify of their operational status and energy consumption. Environmental sensors monitor temperature and ambient light. Cameras stream video of traffic conditions.

The dashboard makes real-time data from smart infrastructure accessible at a glance:

• Color-coded icons on a map of the city show parking usage, availability and violations, traffic density and lighting status.

• System messages that can be browsed, filtered, and searched provide information about individual sensors, such as, parking spaces, lights, and more.

• User-configurable reports show trends in infrastructure use, energy consumption, and more.

The system also interacts with mobile companion applications that the public can use to find, reserve, and pay for parking spaces from mobile phones and other devices. These companion applications interact with
payment gateways to collect parking fees and issue receipts on the mobile device itself. A special companion application for Enforcement Officers notifies the officer of parking violations, allows the officer to generate a parking ticket, and also captures photographic evidence of the violation.

The platform provides benefits to a wide variety of users:

- **Private citizens** enjoy the benefits of managed city infrastructure: increased safety, energy savings, real-time traffic information with streaming video, and more convenient parking.

- **Operators** use the dashboard to create and modify policies.

- **Enforcement Officers** can manage parking more efficiently. Enforcement Officers can also use the dashboard to perform a subset of the tasks available to Operators.

- **Administrators** configure the dashboard for use. They may also configure managed devices and the wireless network that platform infrastructure uses. A detailed discussion of Administrator responsibilities is outside the scope of this Guide.

- **Municipalities** use platform to provide safer, more reliable infrastructure while enjoying energy savings, real-time monitoring of infrastructure status, modernized workflow for managing incidents, such as, traffic accidents, more consistent enforcement of parking policy, and more flexible parking policy that can enhance revenue opportunities at peak-usage times while offering discounted rates at less-occupied times.

## Accessing the System

You must provide a valid user name and password to access the Cisco Kinetic for Cities dashboard. Successful login provides access to a base set of features that are available to all logged-in users. An Administrator can make additional features available to an individual account by assigning additional roles to the account. Each role provides access to specific features of the dashboard.

- **Default**
  
  All accounts have this role, which enables the account to login or logout, change its own password and access the Dashboard application.

- **Enforcement Officer**
  
  Uses policies and notifications, as well as performs all tasks that Default role allows.

- **Operator**
  
  Defines and modifies policies, performs all tasks that the Enforcement Officer role allows.

- **Administrator**
  
  Create/delete accounts, assign roles, create and assign locations, as well as perform all tasks that the Operator role allows.

## Logging into the Dashboard

To use the dashboard, you must first log in with your valid username and password.
Before you begin

You will need the following to log into the dashboard

- **Supported Web browser:**
  - Google Chrome (version 42.0 and above)
  - Mozilla Firefox (latest version)
  - Mac Safari (version 10.0 and above)

- **Username and Password**

  Once your account is created by the admin, you will receive an email. This email contains the link to set the password along with the password rules.

  ![Figure 1: Terms and Conditions](image)

  **Note** The set password remains valid for a period of 90 days.

  If you try to login to the dashboard after 90 days, you will get redirected to Change Password page. For details, see Changing Your Own Password, on page 7

New user has to accept the Terms and Conditions before signing into the application.

*Figure 1: Terms and Conditions*

---

**Step 1**

In a web browser, open the Cisco Kinetic for Cities dashboard using the URL provided by administrator.

A login page like the one in the following figure appears.
Step 2

Enter your username and password.

Click **Sign In**.

The Dashboard page appears.

Second login onwards, you would see the Last Sign In date and time details on the dashboard banner as shown below:

*Figure 4: Last Sign In Details*
Session Timeout: If a logged in user does not perform any activity for a period of 15 min, then the user automatically gets logged out.

What to do next
Also see Understanding the User Interface, on page 27.

Forgot your password?
Three invalid attempts of logging into the application results in account getting locked for 15 min. In case you have forgotten your password, you can create a new one.

- Perform the following steps in order to generate a new password

Step 1  Click on "Forgot your password?" link present on login screen. Forgotten Your Password? screen gets displayed.

Figure 5: Forgot password link on login screen
Figure 6: Forgot Password Screen

Step 2 Enter your Username and Click on Submit
Login screen gets displayed with a message informing user that a reset link has been sent to the registered email.

Figure 7: Reset Link Message

Step 3 Click on the link received in the email.
You would be redirected to the Enter New Password screen.
Step 4

Enter New password, repeat the password in next field and Click Submit

Password successfully changed message is displayed.

Note

Password used in recent history cannot be used.

What to do next

- 

Changing Your Own Password

Users can change their own password from the dashboard at any time. However, only an administrator can change or reset another user’s password.

Before you begin

Log into the dashboard; see Logging into the Dashboard, on page 2

Step 1

Click on the dashboard banner and then choose the Settings menu item.
The User Details panel displays a Change Password button.

**Step 2**

Click on Change Password button. The Change Password controls appear.

**Step 3**

Specify the new password.

a) Type your current password in the **Current Password** field

b) Type your new password in the **New Password** field.
c) Type your new password in the **Re-enter Password** field.

d) Click **Save**.

The **Settings** panel disappears and a notification confirming successful change of your password overlays the screen.

*Figure 12: Notification of successful password change*

---

## Logging out of the dashboard

To end your session, click **Sign Out**.

---

**Step 1**

Click the gear icon at the upper-right corner of the dashboard.

The **Sign Out** menu item appears.

*Figure 13: Sign Out*

**Step 2**

Click the **Sign Out** menu item.

A confirmation box appears as shown below
Step 3  To end your session, click Yes.
The session ends and the login screen reappears.

Customizing Dashboard Page

Cisco Kinetic for Cities allows you to create views that provide quick access to the custom dashboard page you need. You can select different modules from widget to create your custom dashboard page. The customize dashboard displays data for various modules selected in Widget in the interactive board form.

Creating Custom Dashboard Page

You can create and add a new custom dashboard by completing the below steps:

1. Click Add Dashboard on top menu of the dashboard tab.

   Figure 15: Adding Dashboard Name

2. Enter the name of your dashboard.
   Click Ok.
3. The new dashboard view will be created and added to the Dashboard on the upper left corner of the dashboard page.

Adding a Module

You can add a new module to the dashboard by completing the below steps:

1. Select a module from Add Widget to create a customize view for your dashboard.

2. The selected module will be added to the dashboard page.

Viewing a Custom Dashboard

You can view a custom dashboard by clicking Dashboard on the upper left of the dashboard page. All the customised Dashboard widgets added by other users can be seen here.

1. Click on the dashboard to select the dashboard view that you want to appear on the dashboard page. In the below example, Default view for dashboard is selected.
2. To view the detailed Widget view for a module, click located on top left corner of the module widget.

3. The detailed widget view of the module appears. Click on **Module Layers** to expand the menu and see the list of parameters available.

4. Click to exit the detailed widget view and come back to the Dashboard page.

**Viewing User Details**

As an operator, you can view the Name, Phone number, Email id associated with your Username and the various Locations and Roles assigned to you.
Before you begin

Log into the dashboard; see Logging into the Dashboard, on page 2

---

Step 1

Click on the dashboard banner.

Click **Settings**

*Figure 20: Setting Menu*

The **User Details** panel appears by default. This page displays the Name, Phone number and Email id present in the system against your Username.

*Figure 21: User Details panel*

Step 2

To view the roles and locations assigned to you, click **Role Details** on the left navigation bar of the dashboard. The right hand side panel displays the Roles and Locations assigned to you.
Applying Your Own Theme Settings

Users can change their own theme settings using the Theme Settings section of the dashboard.

Before you begin
Log into the dashboard; see Logging into the Dashboard, on page 2

Step 1
Click on the Settings icon in the upper-right corner of the dashboard banner.

Click Settings
The User Details panel appears by default Changing Your Own Password, on page 7

Step 2
To apply a theme, click Theme Settings in the left navigation bar of the dashboard.

The Theme Settings panel appears on the screen.

The panel displays the list of themes available to apply on dashboard. It also displays the existing applied theme on dashboard with name Current Theme.
Step 3

Select a Theme that you want to apply for your dashboard. The Change Theme dialog box appears.

Figure 24: Change Theme

Step 4

Click Yes.

The selected theme appears on the dashboard screen. The applied settings are stored locally in web browser's cache and are reset to default values on clearing cache.

Figure 25: View Selected Theme
Customizing Map Type, Region, and Updating Config File

Users can customize their own map type, default region and update config file using the Customization section of the dashboard. There are two Map types available: 'Mapbox' and 'Esri'.

A Mapbox map type appears as shown below:

Figure 26: View Selected Mapbox Map Type

An Esri map type appears as shown below:
Before you begin

Log into the dashboard; see Logging into the Dashboard, on page 2

Step 1

Tap on Settings menu item.

The User Details panel appears by default.
Step 2
To customize a map type and region, click the **Customization** link present in the left side menu of the dashboard. The Customization panel opens up displaying the **General** tab by default.

**Figure 29: General Customization Panel**

Step 3
On the **General** tab, select the Map Type and Default Region from the drop-down and then click **Update**.
The selected map type will be displayed for selected Default region in Map View. These settings are stored locally in web browser's cache and are reset to default values on clearing browser's cache.

Step 4
To update config file, click the **Update Config** tab and then browse the .json file that you want to upload.
This .json file should contain various parameters for setting max, min, threshold values. For a sample file, please contact Support team. Below code snippet displays a sample data.

**Figure 30: Update Config Customization Panel**
Figure 31: Sample Data

```json
{
  "configId": 0,
  "labelProperty": "co",
  "description": "CO",
  "warningThreshold": 10,
  "normalThreshold": null,
  "roundToDecimals": 2,
  "show": true,
  "activeUnitIndex": 0,
  "availableUnits": [
    {
      "configId": 0,
      "units": "ppm",
      "label": "ppm",
      "expression": "x"
    },
    {
      "configId": 1,
      "units": "ppb",
      "label": "ppb",
      "expression": "x"
    }
  ]
}
```

Configuring the Modules

You can configure your module using Advanced section of the dashboard. You can change the configuration setting of modules such as threshold values, max and min values of parameters on the Advanced menu.

**Before you begin**

Log into the dashboard; see Logging into the Dashboard, on page 2

**Step 1**

Click on the icon in the upper-right corner of the dashboard banner.

Click the Advanced menu item.

Figure 32: Advanced Menu

The Advanced panel opens up Lighting module by default.
Configuring the Modules

**Figure 33: Lighting Module Panel**

- Select the Light Saving Time in Day, Week, and Month from drop-down.
- Select round to decimals or type the number of decimal places you want to display.
- Select the different units for Power meter as shown below:
  - Select unit in V and **Add Custom Units** from the **Voltage** drop-down.
  - Select unit in A and **Add Custom Units** from the **Current** drop-down.
  - Select unit in Kwh, Joule, Gram Calorie, and **Add Custom Units** from the **Active Energy** drop-down.
  - Select unit in Kwh, Joule, Gram Calorie and **Add Custom Units** from the **Reactive Energy** drop-down.
- Click **Save** to save the configuration for Lighting module or else **Reset** to reset the configuration for Lighting.

The configuration will be updated successfully and notification confirming updated configuration successfully overlays the screen.

**Figure 34: Light Module Configuration**
**Step 2**

To add a custom unit in Power meter, select the **Add Custom Units** from the drop-down. Specify the Unit, Label, and Expression fields and then click **Add units**. The below example shows a new custom unit added for Voltage power meter.

*Figure 35: Add Custom Units*

![UNITS - POWER METER](image)

The new custom unit will be displayed as **Volt** unit from the **Voltage** drop-down.

*Figure 36: Display Custom Units*

**Step 3**

To change the configuration setting for **Waste Management** module, click **Waste Management** on the left side of the dashboard. The **Waste Management** panel appears on the right side of the dashboard.
Step 4

Toggle **Show Waste Space** to yes and then specify the field values in the Waste Thresholds section.

- Select *Empty_bin*, or *Halffilled_bin*, or *Fullfilled_bin* from the Icon drop-down and then accordingly choose the color from the class drop-down. For example, you can choose green color from class to indicate the bin is empty, orange color for half-filled bin, and red for full-filled bin.

- Select or type the Minimum Value, Maximum Value, and Round to Decimals to measure the state of waste bin icon.
• Select the Units from the **Temperature** drop-down to measure the temperature of waste bin.

*Figure 39: Waste Management - Units*

![Temperature Units](image)

• Click **Save** to save the configuration for Waste Management module or **Reset** to change the configuration for Waste Management.

The configuration will be updated successfully and a notification confirming configuration updated overlays the screen. Once these values are successfully configured, these values get reflected in the map view under Map Legend.

*Figure 40: Waste Management Configuration*

![Configuration Success Message](image)

**Step 5**

To configure the Crowd module, click **Crowd** on the left side of the dashboard. The Crowd panel appears on the right side of the dashboard allowing you to set configuration items for Crowd Items, WiFi Zone Threshold, and Crowd Cluster Type Items.
Step 6

To configure the crowd items for Crowd module:

a) Select Crowd Item from the drop-down such as Crowd Count, Vehicle Count, Vehicle Direction, Bicycle Count, Crowd Wifi, etc.
b) Specify the Description field based on the Crowd Item. For example, description for crowd count is live people count.
c) Specify Label, Report Label, Round to Decimals, Warning Threshold, and Normal Threshold fields for Crowd Item.
d) Toggle the Show Legend and Show this item to Yes to display legend for Crowd Item.
e) Select units from drop-down to measure the crowd count.

**Step 7**

To configure the WiFi Zone Thresholds for Crowd module, click the **Add Threshold** button. Specify the value for minimum connected, maximum connected, and color to indicate the WiFi Zone Threshold.

*Figure 42: WiFi Zone Threshold Configuration*

<table>
<thead>
<tr>
<th>WiFi Zone Thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Connected Value</td>
</tr>
</tbody>
</table>

**Step 8**

To configure the Crowd Cluster Type Items, select the Crowd Cluster Type from drop-down.

For example, you can select the **Average Value, Total Value, or Sensor Count** from the Crowd Cluster Type drop-down.

*Figure 43: Crowd Cluster Type Items - Crowd Module*

**Step 9**

To configure the traffic module, select the following Units from drop-down and then click **Save**:

a) **Inflow**: refers to number of vehicle inflow, you can select the following units from Inflow drop-down such as Number of Vehicles since last minutes, Number of Vehicle since last hours, or Add Custom Units.

b) **Outflow**: refers to number of vehicle outflow, you can select the following units from Outflow drop-down such as Number of Vehicles since last minutes, Number of Vehicles since last hours, or Add Custom Units.

c) **Average Speed**: refers to average speed of vehicle, you can select the following units from drop-down to measure average speed such as Mph, Kph, Mps, or Add Custom Units.
d) **Vehicle Density**: refers to density of vehicle, you can select the following units from drop-down to measure vehicle density such as Vehicles/M2, Vehicles/Mile2, Vehicle/Km2 or Add Custom Units.

e) **Congestion**: refers to vehicle congestion, you can select Add Custom Units from Congestion drop-down.

*Figure 45: Traffic Module Configuration*

---

**Step 10**

To configure the Environment module, click the Environment module from the left panel of the dashboard. The Environment module panel appears on the right side of the dashboard allowing you to set configuration for Environment Items and Environment Cluster Type Items.

*Figure 46: Environment Module Panel*

---

**Step 11**

To configure the Environment module, toggle the **Show Dynamic Environment Legend** to yes and then configure the Environment items:

a) Select the parameter from the Environment Item drop-down list such as CO, NO, CO2, NO2, SO2, O3, etc.

b) Enter the field description for selected environment item.

c) Enter the value in Warning Threshold, Normal Threshold and Round to Decimals fields.

d) Enter the Short Name and Long Name for selected environment item.


**Understanding the User Interface**

The CKC Dashboard Web GUI application is also referred to as Dashboard. The application has many navigation tabs such as Dashboard, Map View, Alerts, Policies, Events, Reports, Video Wall.

---

e) Toggle the Show Legend, Show Short Name, Show this Item to yes and then select the Component Type and units from respective drop-down.

To configure Environment Cluster Type Items, select the Environment Cluster Type Items from drop-down and then click **Save**. For example, you can select the **Average Value**, **Total Value**, or **Sensor Count** from the Environment Cluster Type Items drop-down.

*Figure 47: Environment Cluster Type Item - Configuration*

---

**ENVIRONMENT CLUSTER TYPE ITEMS**

<table>
<thead>
<tr>
<th>Select Environment Cluster Type Item</th>
<th>Total Value ▼</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Value</td>
</tr>
<tr>
<td></td>
<td>Total Value</td>
</tr>
<tr>
<td></td>
<td>Sensor Count</td>
</tr>
</tbody>
</table>

The configuration will be updated successfully and a notification confirming configuration updated overlays the screen. Please note the Stat and End values added in this section over write the Warning and Normal Threshold values added above.

*Figure 48: Environment Module - Configuration*

---

**ENVIRONMENT CLUSTER TYPE ITEMS**

<table>
<thead>
<tr>
<th>Select Environment Cluster Type Item</th>
<th>Total Value ▼</th>
</tr>
</thead>
</table>

---

**Note** These changes are stored in database and would be accessible to any other operator accessing the same region.
Upon successful login, the application displays the Dashboard of your region, which summarizes the overall status of frequently viewed infrastructure features and provides quick access to the latest notifications. The following figure shows the home page of the Dashboard.

**Figure 49: Home Page of the Dashboard**

- **Zoom In / Zoom Out**

  Change the level of detail that appears in the Map View.

  - For more detail, click **Zoom In**. For example, zooming in on a parking lot displays individual parking spots in that lot.
  - For less detail, click **Zoom Out**. For example, if you can see individual parking spots, click Zoom Out one or more times to see the icon that represents the parking lot.

**Figure 50: Zoomed In Map view**
Region Selector

Displays the name of the region that appears in the Map View. To view a different region, type the first few letters of its name in the Region Selector, choose a region from the list that appears, and then hit the Enter key.

Named regions facilitate management of smart infrastructure. A region is a geographical area that has specific boundaries. An administrator can create multiple regions within a city and can assign Enforcement Officers or Operators to each region. If you are an operator or an enforcement officer, the Region Selector displays only regions to which you are assigned.

Dashboard Tabs

The following tabs allows you to apply policies, view the status or values and reports of the different infrastructure modules that you select. The tabs are displayed according to your assigned role:

- **Dashboard**: Displays the summarized overall status of frequently viewed infrastructure features and provides quick access to the latest notifications, profile settings, and region selector.

- **Map View**: Displays information of the selected infrastructure modules for a selected region. For more information, see Using the Region Map, on page 33.

- **Alerts**: Displays the alert information for different modules. For more information, see Alerts: System-Actionable Incidents, on page 122.

- **Policies**: Depending on Read, Write permissions configured for the assigned role, the user can use this tab to create and apply a certain set of rules that control smart infrastructure. For more information, see Policies Page, on page 81.

- **Events**: Allows the user to create cross domain action when any set condition is met. For more information, see Events Page, on page 111.

- **Reports**: Provides options for generating and viewing reports from the data that the smart infrastructure collects. For more information, see Reports, on page 141.

- **SOP**: Provides options for defining work flow for an incident, create an instance and task. For more information, see Workflows, on page 129.
• **Video Wall**: Provides live feeds from cameras placed at various locations. For more information, see Video Wall, on page 153

*Figure 52: Dashboard Navigation Tabs*

- **Notifications**

Real-time informational notices, alerts, and other activity feeds from individual sensors, such as, parking spots, lights, and so on. When unread notifications are present, the Notifications icon bears a numeral that indicates the number of unread notifications. Notifications can be browsed or searched. Informational notifications cannot be acted upon within the system, but for alerts, such as, parking violations are actionable within the system. For more information, see System Messages: Notifications, Alerts and Alarms, on page 121

- **Internationalization/Localization** You can change the language in which you want to view the dashboard using the option. You can switch between English and French languages in the current version. The applied localization changes are stored locally in web browser's cache and reset to default values on clearing browser's cache.

*Figure 53: Localization Support*

- **Settings**

Displays the Name and Role of the logged-in user, and provides Settings, Advanced and Sign Out options. To open the User Menu, click that appears at the upper right corner of the dashboard.

  - **Sign Out**: Ends your dashboard session.

  - **Settings**: Provides access to user details, role details, including the ability to change your own login password, theme setting and customize map type and upload configuration file.
• **Advanced**

  Enables logged in user to customize various modules such as Lighting, Traffic, Crowd, Environment by specifying the max, min, threshold values.

• **Module Layers**

  **Note**

  All the Modules that the dashboard supports may not be available to you. Only the modules or domains that an administrator has configured for operator role of the tenant will be available.

Cisco Kinetic for Cities dashboard supports the following modules or domains:

• **Parking**

  Parking lots and individual parking spots, occupancy metrics, violations and violation metrics, parking fares, parking policy features.

• **Lighting**

  Locations and status of streetlights, energy-consumption metrics, lighting policy features.

• **Environment**

  Live weather conditions (temperature, clouds, wind, humidity), air quality, and the daily, weekly, monthly reports can be generated.

• **Urban Mobility**

  Live vehicle, crowd and devices count, and the daily, weekly, monthly reports, Color-coded streets that indicate traffic flow can be viewed.

• **Waste Management**

  Waste bins, waste spaces, waste type and waste bin summary status such as provider name, temperature, last collected and last updated details can be viewed.

• **Safety and Security**
Camera health, citizen alert, person identified, fire and smoke detection, Live video feeds can be seen.

The following figure shows the dashboard view of the Crowd module. You can also see dashboard view for other crowd parameters such as crowd direction, vehicle count, vehicle direction, Wifi (WiFi device count), dwell time, device path analysis, and trace analysis.

Figure 55: Crowd Count display on Map View
CHAPTER 2

Using the Region Map

- Displaying the Region Map, on page 33
- Enabling or Disabling Module Output in Map View, on page 33
- Getting Details from Map View, on page 37

Displaying the Region Map

Any user can view the region map, which is also known as Map View. When you log in to the Cisco Kinetic for Cities Dashboard, it displays the Dashboard page by default. To navigate to the region map, take the following steps.

**Before you begin**

Log in to the Cisco Kinetic for Cities Dashboard Web GUI.

**Step 1**
Choose Map View in the Cisco Kinetic for Cities Dashboard banner. The Map View page displays the region map. For more information, see Understanding the User Interface, on page 27.

**Step 2**
Enable output from available modules as necessary. See Enabling or Disabling Module Output in Map View, on page 33.

**Step 3**
Zoom to vary the level of detail displayed. See Getting Details from Map View, on page 37.

Enabling or Disabling Module Output in Map View

Selecting a module causes its sensors and data to become available in Map View. Deselecting a module removes its sensors and data from Map View.

**Note**
Deselecting a module does not deactivate it. Smart infrastructure always reports data to the system and it always enforces active policies, regardless of whether you choose to view output from a particular module.
Before you begin

You must be logged in to the Cisco Kinetic for Cities Dashboard Web GUI.

---

**Step 1**
Click **Map View** tab located in the top navigation bar of the CKC dashboard. The **Map View** page appears.

**Step 2**
Click **Module Layers** at the upper-left corner of **Map View**.

The module selector displays installed modules that your role permits you to access.

*Figure 56: Module Selector*

---

**Step 3**
Select modules to be viewed and deselect modules to hide.

- **To select a module**, select check box corresponding to the module. Selecting a module makes it available in the **Map View**.
- **To deselect a module**, clear the check box corresponding to the module you want to deselect. Deselecting a module makes it unavailable in **Map View**.

For example, selecting the **Parking** module makes parking lots, parking spaces, parking violations and parking notifications/alarms visible in **Map View**. When the **Parking** module is not selected, these items do not appear in **Map View**.

**Step 4**
To hide the **Module Selector**, click on expanded **Module Layers** to collapse it.

**Step 5**
Select any module by selecting the check box and keep zooming in.

For example, selecting the **Lighting** module and zooming in displays Light sensors and hovering over it, shows the summary details.
**Step 6**

To view temperature or infrared radiation recorded over selected region, select the module and then click the **Heat Map** button in the upper right corner of the dashboard.

For example, Selecting the Environment module and then clicking the Heat Map will display the temperature recorded for selected region.

*Figure 58: Heat Map Selected for a Region*
**Step 7** To select multiple sensors at one go, select the module and then click the **Selection Tool** button in the upper right corner of the dashboard. Now click and drag the cursor to form a rectangle. The selected sensors fall under the rectangle. For example, select the Waste Management module and then click the Selection tool which highlights the selected region.

**Step 8** To view Map Legend for module, select the module and then click the **Map Legend** button in the upper right last corner of the dashboard. For example, selecting the Safety & Security module and then click the Map Legend will display the color legend such as low, medium, and high.

*Figure 59: Map Legend for Safety & Security*

**Step 9** To highlight the entire region on the map view, click **Select Region** button in the upper right corner of the map view. For example, while viewing the region map for Spain region, if you click on **Select Region** button, the entire region appears highlighted on Map View.
Select Parking module and Click on Parking View button to see all Parking Violations on map View.

What to do next

Use Map View to view information of the selected modules.

Getting Details from Map View

You can retrieve additional details from items in Map View by selecting them, by zooming to control the level of detail that Map View displays, and by browsing alerts and notifications that appear under the Notifications icon.

Selecting Items for Summary Information

Map View displays summary information about the current selection automatically.

• Single-click an icon to select it; click another item of the same kind to add it to the selection.
Selecting an item highlights it and displays additional information about the selection. For example, selecting a Light icon displays a banner that summarizes the Light status and provider information.

- To deselect a highlighted item, click it again. The summary banner updates as necessary to display information about the changed selection. When no items are selected, the banner disappears.
- Double-click an individual item to display details.

For example, if you double-click a parking lot, the individual parking spaces appear. Similarly, if you double-click a lighting group, the individual lighting sensors appear.

### Zooming to Control the Level of Detail

You can use the Zoom In and Zoom Out controls to change the level of detail that Map View displays. Please refer [Understanding the User Interface, on page 27](#).

### Cameras display on Map View

Selecting the domain as 'Cameras', displays all the cameras that are present in the region, these could be Video Wall cameras streaming live feeds, Safety cameras placed to monitor objects. Below figure displays Map view with different cameras where green, orange and blue indicate the condition of camera as "good, warning and unknown" respectively. The right side of the split view screen lists out cameras' status and provider details. Hovering on any icon shows a high level overview of the camera details with several options. For more details on actions that can be performed on displayed feeds, see section on video wall [Using Video Wall Section, on page 153](#).
Getting Urban Mobility Information from Map View

Urban Mobility displays map view for the following modules:

- **Traffic**
- **Crowd**
- **Transit**

To view Map View for Urban Mobility, click **Map View > Module Layers > Urban Mobility**
Getting Traffic Information from Map View

The Traffic Map View displays the traffic network of the geographical area. When the Traffic Module is selected, by default the Current Traffic radio button is enabled. However, you can also view traffic map based on traffic historic data. For information on Traffic Parameter, see Configuring Traffic Settings in the Traffic Details Panel, on page 46.

Getting Crowd Information from Map View

When the Crowd module is enabled, Map View displays the crowd parameters, and the corresponding overlays that indicate the people, direction, vehicle, or device count as per the selected parameter. By default, the Crowd Count parameter is selected, which displays the people count at a given location. For information on Crowd Parameters, Viewing Crowd Parameter Details, on page 54.
Getting Transit Information from Map View

When the **Transit** module is enabled, Map View displays the transit routes and indicates the details of the vehicles on the route such as vehicle status, vehicle speed, vehicle registration number, route name, current stop, route schedule, etc. For information on Transit Parameter, see Viewing Transit Parameter Details, on page 57.

Displaying the Traffic Details Panel

When the **Traffic** module is enabled, any user can view the Traffic Details panel in Map View.

**Before you begin**

Log in to the Cisco Kinetic for Cities.

---

**Step 1**

Click **Map View > Module Layers > Urban Mobility** on the Map View. The **Map View** page displays the region map. For more information, see Understanding the User Interface, on page 27.

**Step 2**

If the **Traffic Details** panel does not appear in **Map View**, enable the **Traffic** module. See Enabling or Disabling Module Output in Map View, on page 33.

**Step 3**

Click the + button on the **Traffic Details** panel to expand and view the zoomed in details.

You can now configure the display of traffic details and zoom as necessary to view those details. For more information, see Configuring the Traffic Details Panel, on page 44.

---

**Getting Traffic Information from Map View**

When the **Traffic** module is enabled, a variety of traffic information is available on Map View, such as traffic flow, traffic incidents, route analysis and drive times.
Traffic Details Panel

The **Traffic Details** panel appears in Map View when the **Traffic** module is enabled. You can use the **Traffic Details** panel to control the kinds of traffic-related information that **Map View** displays. The **Traffic Details** panel specifies whether **Map View** displays current or historical Traffic and Incident data. All other traffic sensors provide current data in real time.

*Figure 66: Traffic Details panel*

![Traffic Details Panel](image)

Traffic-Flow Visualization

The **Traffic** section of the **Traffic Details** panel controls the **Map View** display of traffic-flow visualizations like the examples in the following figure.
Traffic Incident Visualization

The **Incidents** section of the **Traffic Details** panel controls the **Map View** display of icons that represent traffic incidents such as accidents, road construction, traffic congestion, speeding violation, stopped vehicle violation, wrong way direction.

Route Analysis Visualization

The **Route Analysis** displays the traffic-flow visualizations for the route between a specific departure point and destination.
Drive Times Visualization

The **Drive Times** displays visualizations of driving times from a specific departure location to other areas of the region map.

Configuring the Traffic Details Panel

Expanding the **Traffic Details** panel provides access to controls that you can use to configure the display of current or historical traffic-related data in **Map View**.

**Before you begin**

Enable the **Traffic Details** panel; see Displaying the Traffic Details Panel, on page 41

**Step 1**

To expand the **Traffic Details** panel, click the **Urban Mobility > Traffic**.
The following controls appear:

**Current Traffic/Historical Traffic**: Specifies whether Map View displays current or historical traffic data. Availability of other Traffic Details controls varies according to this setting.

**Traffic**: Enables or disables the display of traffic data that is selected according to user-configurable parameters such as kinds of traffic flow, kinds of roads and kinds of vehicles.

**Incidents**: Enables or disables the display of incident data that is selected according to user-configurable parameters such as accidents, construction zones, traffic congestion, speeding violation, stopped vehicle violation, and wrong-way direction.

**Route Analysis**: Enables or disables the display of color-coded traffic-flow information on the route between a specific starting location and a specific destination.

**Drive Times**: Enables or disables the display of a color-coded "heat map" showing the distance that can be traveled from a user-specified starting location within various periods of time.

**Step 2**
Click the **Current Traffic/Historical Traffic** radio button to specify whether to display current or historical traffic details. If the radio button name is **Current Traffic**, then the Web GUI displays current traffic data. If the radio button name is **Historical Traffic**, then controls for specifying the time period appear, and the Web GUI displays data generated within the specified time period.

**Step 3**
Configure **Historical Traffic** date and time controls if they are visible; otherwise, go to the next step.

1. Click on the date-picker button.

   ![Date-setter control](image)

2. Set the month, day, and year to the desired date.

3. To set the time of day at which the enforcement period begins, type out the timestamp in hh:mm:ss format. Alternatively, you can select a column and use the up-down arrows to set the time.

**Step 4**
Enable or disable any of the **Traffic, Incidents, Route Analysis** or **Drive Time** panels according to your informational needs.

The Map View updates in real time to reflect your current choices. When you enable a panel, it selects data according to the user settings associated with the panel; if the panel has not been used previously, it uses default settings. For more information see the following:
Configuring Traffic Settings in the Traffic Details Panel

You can change Traffic settings in the Traffic Details panel to specify criteria that traffic data must meet in order to be displayed in Map View. Such criteria include kinds of traffic flow, kinds of roads and kinds of vehicles that generate the raw data to display.

Before you begin
Log in to the Cisco Kinetic for Cities in the Operator role.

Step 1
Click Map View>Urban Mobility>Current Traffic>Traffic
The Traffic panel appears.

For more information, see Enabling or Disabling Module Output in Map View, on page 33

Figure 72: Traffic Panel

Step 2
To view Traffic map view, select radio buttons to specify the kinds of traffic data to display. You can choose only one button at a time from each of the following categories.

- Traffic Parameters
  - Inflow, Outflow, Average Speed, Vehicle Density, Congestion

- Classification of Road:
  - All, Interstate, Arterial, Highway, Local

- Vehicle Classes
  - All, Car, Motor Cycle, Truck.

The Traffic Segment map view appears based on the selected traffic parameter, which displays Road Segment, Vehicle Stopped, Wrong Way, Congestion, Under Constructions, and Accidents. Below image displays Traffic Congestion at various locations.
**Figure 73: Traffic Congestion View**

Green color legend indicates Free flow traffic whereas Orange, Red and Brown indicate slow, slower and slowest traffic respectively. Hovering the mouse over any section of the Traffic segment displays details about Road Segment, class, Vehicle class, Last Updated Time and Congestion type.

**Figure 74: Traffic Congestion - Legend**

**Step 3**  
Select the Traffic Parameter as "Average Speed" and hover the mouse over any segment. This displays the average speed of vehicles.
Configuring Incidents Setting in the Traffic Details Panel

You can view **Incidents** parameter in the **Incidents Type** to specify the kinds of traffic incidents that Map View displays, such as traffic accidents, under construction zones, areas of traffic congestion, speeding violation, stopped vehicle violation, and wrong way direction.

**Step 1**
To view traffic map based on Incident Type, click **Map View > Urban Mobility > Traffic > Current Traffic > Incidents > Incidents Types**.

The **Incidents Type** appears.
Step 2

Select check boxes to specify the kinds of incidents to display.

You can select as many of the following categories as you prefer.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accidents</td>
<td>Traffic accidents</td>
</tr>
<tr>
<td>Under Construction</td>
<td>Construction zones</td>
</tr>
<tr>
<td>Congestion</td>
<td>Traffic traveling below the posted speed limit for reasons other than an accident or a construction zone.</td>
</tr>
<tr>
<td>Speed Violation</td>
<td>Speed violation, such as vehicle exceeding the speed limit in traffic.</td>
</tr>
<tr>
<td>Stopped Vehicle Violation</td>
<td>Non-moving violation of vehicle in traffic.</td>
</tr>
<tr>
<td>Wrongway Direction</td>
<td>Moving of vehicle in a wrong direction traffic.</td>
</tr>
</tbody>
</table>

To reset the parameters panel to its default state, click **Clear All**.

The selection state of the check box changes to reflect your choices. When an item is selected, a checkmark appears in its check box.
Step 3

The below figure shows the Accidents check box is selected from the Incident Type. The Map View displays the traffic accident view.

Hovering your mouse opens to Traffic Accident box, which displays accident information such as date and time of accident occurrence.

Additionally, you can also dismiss incident, take action on accident, select and update severity, and get more information about the accident.
Configuring Route Analysis Settings in the Traffic Details Panel

You can change Route Analysis settings in the Traffic Details panel to specify the route for which Map View displays traffic-flow data.

**Before you begin**

Open the Traffic Details panel; see Displaying the Traffic Details Panel, on page 41

**Step 1**  
To view Traffic Map based on Route Analysis, click Map View > Urban Mobility > Current Traffic > Route Analysis. The Route Analysis opens the Route Detail box, that prompts you to provide source and destination location.

The Route Analysis displays traffic map view for the quickest or shortest route between the source location and destination location. It also displays the current traffic between your source and destination location.
Step 2
Select the **Route Analysis** check box.
A parameters panel like the one in the following figure appears.

*Figure 81: Route Analysis user parameters panel*

Step 3
Enter the starting point of the route in the **From** field.

a) Begin typing an address or partial address in the **From** field.
As you type, potential matches appear in a pop-up list.

b) When you see the location that matches your intended starting point, choose it from the list.

**Note**
It is important to choose a match from the list instead of typing the entire location yourself. The **Route Analysis** feature recognizes only the items that appear in this list.

Step 4
Enter the end of the route in the **To** field.

a) Begin typing an address or partial address in the **To** field.
As you type, potential matches appear in a pop-up list.

b) When you see the location that matches your intended starting point, choose it from the list.

**Note**
It is important to choose a match from the list instead of typing the entire location yourself. The **Route Analysis** feature recognizes only the items that appear in this list.

Step 5
Click **Go**
Map View displays a color-coded rendition of the shortest route between the specified locations. The colors indicate traffic congestion on the specified route.

Configuring Drive Time Settings in the Traffic Details Panel

You can change Drive Times settings in the Traffic Details panel to specify the starting location for estimated drive times in Map View.

Before you begin

Open the Traffic Details panel; see Displaying the Traffic Details Panel, on page 41

Step 1

To view Traffic Map based on Drive Time, click Map View > Urban Mobility > Current Traffic > Drive Time. The Drive Time Detail control appears.

Figure 82: Drive Time

Step 2

A parameters panel like the one in the following figure appears. The Drive Time opens the Drive Times, box that prompts you to provide source location for which you want to view drive time.

The Drive Time displays details for drive time map view for search location.

Figure 83: Drive Time user parameters panel

Step 3

Enter in the From field the starting point to use for estimating drive times.
Getting the Crowd Information from Map View

When the Crowd module is enabled, Map View displays the crowd parameters, and the corresponding overlays indicating the people, vehicle, or device count as per the selected parameter. By default, the Crowd Count parameter is selected, which displays the people count at a given location.

Viewing Crowd Parameter Details

To get the crowd information from Map View, perform the following steps:

**Before you begin**

Log in to the Cisco Kinetic for Cities as an Operator role.

**Step 1**

Enable the module as Urban Mobility > Crowd.

All the crowd parameters for a selected region is displayed. By default, the Crowd Count parameter is selected.

For more information, see Enabling or Disabling Module Output in Map View, on page 33

**Step 2**

To view the details of crowd parameters, click any of the following crowd parameters tab:

- **Crowd Count**: The number of people at a given location.
- **Wifi**: The number of devices that are connected to a WiFi at a given location.
- **Crowd Direction**: The count of the people and the direction in which they are moving at a given location. Hovering your mouse pointer over the overlay displays the following information:
  - **Towards North**: The number of people who are moving towards north.
  - **Towards South**: The number of people who are moving towards south.
  - **Towards East**: The number of people who are moving towards east.
  - **Towards West**: The number of people who are moving towards west.
  - **Last Updated**: The date and time when the information was updated.
  - **Provider**: Sensor details.
  - **Label**: Label information
The pop-up dialog box disappears when you move away from the overlay.

- **VEHICLE DIRECTION**: Displays the count of the vehicle and the direction in which they are moving at a given location. Hovering your mouse pointer over the overlay displays the following information:
  - **Towards North**: The number of vehicles that are moving towards north.
  - **Towards South**: The number of vehicles that are moving towards south.
  - **Towards East**: The number of vehicles that are moving towards east.
  - **Towards West**: The number of vehicles that are moving towards west.
  - **Last Updated**: The date and time when the information was updated.
  - **Provider**: Sensor details.
  - **Label**: Label information

The pop-up dialog box disappears when you move away from the overlay.

- **VEHICLE COUNT**: The number of vehicles at a given location.
- **BICYCLE COUNT**: The number of bicycles at a given location.
- **Dwell Time**: The time spent at a given location by the crowd.
- **Device Path Analysis**: The Travel time between two nodes where devices are located.
- **Trace Analysis**: The tracking and tracing of one specific vehicle in transit.

**Note**  
Hovering your mouse pointer over the Crowd Count, WiFi, Dwell Time, Vehicle Count, and Bicycle Count displays the additional information, such as, Provider, Last Updated, and Label information.

The following figure shows the map view of Device Path Analysis.
Getting the Transit Information from Map View

When the Transit modules are enabled, the Map View displays the transit parameters. It displays the transit status of the vehicle carrying the good from one source to another destination.
Viewing Transit Parameter Details

To get the transit information from Map View, perform the following steps:

**Before you begin**

Log in to the Cisco Kinetic for Cities in the Operator role.

---

**Step 1**

Enable the Transit module by clicking Map View > Module Layers > Urban Mobility > Transit. All the transit parameters for a selected region is displayed.

For more information, see Enabling or Disabling Module Output in Map View, on page 33

---

**Figure 86: Transit Module**

---

**Step 2**

To view the details of Transit parameters, click on the icon.

You can also click on Zoom In or Zoom out to view the detailed transit parameters.

The transit icon will be divided into two separate transit routes.
Figure 87: Transit Routes

Hovering your mouse pointer over the icon displays the summary for vehicle's transit status.

- **Status**: The vehicle transit status i.e. in service
- **Rider**: The number of current rider for vehicle.
- **Speed**: The speed of vehicle.
- **Registration No**: The registration number for vehicle.
- **Route**: The route details for vehicle.
- **Route Name**: The route name for vehicle.
- **Route Schedule**: The time delay in delivering the good from the actual delivery date.
- **Last Updated**: The date and time when the information was updated.
- **Provider**: Sensor details.

**Note**: The pop-up dialog box disappears when you move away from the overlay.

---

**Getting Waste Management Information from Map View**

When the Waste Management module is enabled, all the waste bins, garbage trucks and garbage collection trips in the current region are visible on the Map View. The right pane of the dashboard provides detailed summary of the waste type, module or domain name, status and provider.

The section detail at the bottom left corner provides you status for waste spaces, waste bins, and region. This can be viewed by clicking the waste map icon or waste bin icon on the map view area. You can view the optimized route between the waste bins by selecting the bins first on the map view and then clicking on Optimize Waste Route button. Also, the section detail shows the status for waste space and waste bin based on the waste name selected in the right pane of dashboard.
Map View also shows Waste or garbage trucks status as shown below: Truck ID, Last Updated date along with time stamp, Agency ID, Speed of the truck, Provider details can be seen. The number of trips made by trucks in order to collect garbage is indicated by garbage collection trips.

Map View uses color coding to indicate the fullness and availability of a waste bin, or waste space:

- Green: waste bin and waste space available (0 - 21 per cent occupied)
- Orange: waste bin and waste space full (22-70 per cent occupied)
- Red: waste bin and waste space completely full(over 70 per cent occupied)
Double-click a waste space icon to display individual waste bin in map view. The **Section Details** displays details for individual waste bin such as waste provider, waste type, last collected, next collection, bin full.

To see waste bin/waste space full/availability status, click one or more waste bins, or waste spaces to select them. The pane on the right side of the dashboard provides waste space name, waste bin name, waste space status, and waste provider. The **Section Details** figure at the bottom left corner of dashboard page shows waste bin status for full and available. Green indicates the waste bin is "available" and orange indicates the bin is "full".
To remove individual items from the selection, click them one at a time; as the selection changes, the waste bin status updates in real time. To clear the entire selection, click the Clear Selection button that appears whenever you select items in Map View.

To view the details of the Waste Bin Parameters, click any of the Waste Bin icon:

1. **Fill Level**: The filled percentage level of the waste bin.
2. **Temperature**: The temperature of the waste bin.
3. **Battery percentage**: The percentage of battery remaining for waste bin
4. **Provider**: The waste bin provider name.
5. **Last collected**: The last time and data the waste was collected from bin.
6. **Last updated**: The date and time when the information was updated.
Getting Environment Information from Map View

When the Environment module is enabled, Map View displays the environment parameters, legend of the selected parameter, and an overlay indicating the value of the selected parameter.

Viewing Environment Parameter Details

To get the environment information from Map View, perform the following steps:

Before you begin

Log in to the Cisco Kinetic for Cities as an Operator.

Step 1

Enable the Environment module.
All the environment parameters for a selected region are displayed.

For more information, see Enabling or Disabling Module Output in Map View, on page 33
Figure 94: Environment Map View

Step 2
To view the values of the environment parameters, click any of the following environment parameters tab:

- **NO$_2$**: The measurement of Nitrogen-di-oxide (Ppm) in the air at a given location.
- **PM$_{2.5}$**: The measurement of PM$_{2.5}$ particulate matter (Mg/M$^3$) in the air at a given location.
- **SO$_2$**: The measurement of Sulphur-di-oxide (Ppm) in the air at a given location.
- **O$_3$**: The measurement of ozone (Ppm) in the air at a given location.
- **Air Quality Index**: The measurement of air quality index at a given location.
- **Temperature**: The temperature (°C) of a location.
- **Humidity**: The humidity level(%) of a location.
- **Noise**: The noise level (DB) of a location.
- **Noise (L.Aeq)**: The noise level (DbA) of a location.
- **Harmonica Index**: The harmonica index of a location.
- **Pressure**: The pressure level (Pa) of a location.
- **Lux**: The Lux of a location.
A legend indicating the upper and lower value ranges and an overlay with the current value for each environmental sensor at a given location is displayed. Hovering your mouse pointer over the overlay displays additional information, such as, Battery Percentage, Last Updated, Provider and Label information. The pop-up dialog box disappears when you move away from the overlay.

The following figure shows the measurement of NO₂ for selected region.

*Figure 95: Environmental Parameters - NO₂ Map View*

The following figure shows the measurement of SO₂ for selected region.

*Figure 96: Environment Parameters - SO₂ Map View*

The following figure shows the measurement of temperature for selected region.
Getting the Safety and Security Information from Map View

When the Safety and Security modules are enabled, Map View displays the safety and security parameters, and the corresponding overlays indicating the camera health, citizen alert, person identified, fire and smoke, fire, garbage, gunshot, influencer, intrusion, loitering, overstay, panic, queue, smoke detection, etc. as per the selected parameter.

Viewing Safety and Security Parameter Details

To view the safety and security information from Map View, perform the following steps:

**Before you begin**

Log in to the Cisco Kinetic for Cities as an operator.

**Step 1**

Enable the Safety and Security Module by clicking Map View > Module Layers > Safety and Security. All the Safety and Security parameters for a selected region are displayed.

For more information, see Enabling or Disabling Module Output in Map View, on page 33

**Step 2**

To view the details of Safety and Security parameters, select any of the following Safety and Security parameters check box:

- **Camera Health**: Displays the current state of the camera health at a given location.
- **Citizen Alert**: Displays the safety and security consideration to alert the citizen at a given location.
- **Person Identified**: Displays the identified person for violation of safety and security at a given location.
- **Fire and Smoke**: Displays the fire and smoke at a given location.
• **Fire**: Displays the fire situation at a given location.

• **Garbage**: Displays the safety and security consideration for waste management at a given location.

The other Safety and Security Parameters are available to view in map view are Gunshot, Influencer, Intrusion, Loitering, Overstay, Panic, Queue, Seismic, Sentiment, Slip and Fall, Smoke Detection, Theft, Train Platform Intrusion, Weather, Environment, Suspicious Object, Graffiti, Maintenance, Vehicle Identified, Smoke, App, Crime, and Camera.

The following figure shows the map view of Fire.

*Figure 98: Safety and Security - Fire*

Hovering your mouse pointer over displays Safety & Security Fire pop-up dialog box from where you can dismiss incident, take action, update severity, and get more information about alert. For details on alerts, refer Alerts: System-Actionable Incidents, on page 122

You can click the x to close the Safety and Security Fire pop-up dialog box.

*Figure 99: Safety and Security Fire - Map View*
The following figure shows the color coding map legend for Safety & Security.

- The map legend color-coding of Safety & Security is **green**, if the alert is of low severity.
- The map legend color-coding of Safety & Security is **Orange**, if the alert is of medium severity.
- The map legend color-coding of Safety & Security is **Red**, if the alert is of high severity.

*Figure 100: Map Legend - Safety & Security*

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**Getting Parking Information from Map View**

When the Parking module is enabled, all the parking lots in the current region are visible in Map View. If you zoom to a sufficient level of detail, Map View also shows "No Parking" zones, fire zones, loading zones, standby zones and individual parking spaces. To see a summary of all of the icons that represent these items, click the Legend tab at the right edge of the page and choose the Parking item from the pull-down menu in the Legend tab.

Map View also shows real time alerts for parking violations, such as expired parking.

Map View uses color coding to indicate the occupancy of a parking lot, parking sensor or parking space:

- **Green**: low occupancy (0 - 21 per cent occupied)
- **Orange**: medium occupancy (22-70 per cent occupied)
- **Red**: high occupancy (over 70 per cent occupied)
Double-click a parking lot icon to display individual parking spaces. Individual parking spaces indicate occupancy slightly differently than parking lots. Green still means the space is "unoccupied," but orange means "occupied," and red indicates a parking violation. For example, the following figure shows a total of three parking spaces: one is occupied (orange), two are available (green) and none are in violation (red) of current parking policy.

To see occupancy/availability statistics, click one or more parking lots, parking sensors or parking spaces to select them. The pane on the right side of the dashboard provides parking space name, parking lot name, and parking space status. The Section Details figure at the bottom left corner of dashboard page shows parking details based on selected space on the right pane of the dashboard. For example, The below Section Details figure show parking occupancy for twelve parking spots in three parking areas. Six of the twelve parking spot selected are highlighted in orange color to indicate that they are in use, and other six spaces are highlighted in green color to indicate that they are available.
To remove individual items from the selection, click them one at a time; as the selection changes, the occupancy statistics update in real time. To clear the entire selection, click the Clear Selection button that appears whenever you select items in Map View.

To search for a specific region or parking zone, type the first few letters of its name into the Region Selection Box in the upper left corner of Map View. A list of potential matches appears as you type. Click an item in the list to display it in Map View.

To determine the policies applied to multiple parking spaces or parking lots, select the items in Map View, then click the Policies/Events button that appears at the lower-right corner of Map View. Policies that apply to the selected items appear in the Apply Policy tab of the Policies/Events dialog box.

Getting Lighting Information from Map View

You can use Map View to obtain the status of lighting groups or individual lighting sensors. To view information about lighting from Map View perform the following steps:

1. Enable the Lights Module.
   
   For more information, see Enabling or Disabling Module Output in Map View, on page 33.

2. Zoom as appropriate to reveal a light group or an individual lighting sensor.

   A lightbulb icon represents an individual lighting sensor. A lighting group icon represents a set of lighting sensors that you can manage as a group.

   For more information, see Getting Details from Map View, on page 37.

3. Retrieve information about a light group or lighting sensor:
   
   • Double-click a light group to view individual lighting sensors within that group.
Getting the Fault Information from Map View

When the **Fault** modules are enabled, **Map View** displays the fault color-coded legend icon, and the corresponding overlays that indicate the provider, affected sensor, affected entity. Additionally, you can also dismiss incident, take action, and update severity and view more information about fault.

Viewing Fault Parameter Details

To get the fault information from Map View, perform the following steps:

**Before you begin**

Log in to the Cisco Kinetic for Cities dashboard as an operator.

**Step 1**

Enable the Fault module by clicking **Map View > Module Layers > Fault**. All the fault parameters for a selected region are displayed.

For more information, see Enabling or Disabling Module Output in Map View, on page 33.
Step 2  
To view the details of fault parameters, click anywhere on the color-coded fault icon: The Map View displays the fault color-coded map icons for the selected region. It also shows the count of the fault based on the map legend.

- **Green Color -Coded Map**: Indicates the fault is low for a given location.
- **Orange Color-Coded Map**: Indicates the fault is medium for a given location.
- **Red Color-Coded Map**: Indicates the fault is high for a given location.

Click over the color-coded icon opens the pop-up box, which displays the fault details for selected region such as date, time, description, provider, affected entity, and number of days and hours since the fault takes place. However, you can also perform the following actions on faults: dismiss incident, take action, update severity and more information.
Click the X to close the Fault pop-up box.
CHAPTER 3

Using the List View

• Displaying the List View, on page 73
• Getting Lighting Information in List View, on page 74
• Using List View to Control Lighting, on page 75

Displaying the List View

User can view a List of data that the Region Map displays graphically. The same can be viewed by performing the following steps.

Before you begin
Log in to the Cisco Kinetic for Cities.

Step 1
Choose Map View in the banner.
The Map View page displays the region map. For more information, see Understanding the User Interface, on page 27.

Step 2
Enable output from available modules as necessary. See Enabling or Disabling Module Output in Map View, on page 33.

Step 3
Select the Module in the upper-left corner of the Map View.
By default, the List view for selected module is displayed in the upper right corner of the dashboard page. The List View displays a list of infrastructure items in enabled modules. You can now browse, search, sort and select items in the list to control them directly or to apply policies to the selected items.
Step 4
Select the check box corresponding to module name to view the map view and status details.
The following figure shows the map view for a module selected in List View.

Figure 109: Map View - Selected Domain

Step 5
You can also search for the module data listed in List View using the Search box located on Map View. Enter Sensor Name, Domain name, Status or Provider name as the search query. The matching records are listed in the List View. You can select this record to view the selected sensors on the Map View.

Getting Lighting Information in List View

You can use list views to find lighting sensors easily. You can select sensors within the list and then control the selected sensors directly or apply a policy to them. To list all lighting sensors and then use the list view to configure individual sensors, perform the following steps:
1. Enable the Lights module.
   For more information, see Enabling or Disabling Module Output in Map View, on page 33.

2. Drag the split bar present on the right side of the map view towards left.
   All of the light sensors appear in list view. Complete details of the sensors such as Name, Domain, Status and Provide Name can be seen.
   
   Figure 110: List View of Light Sensors

3. Select one or more light sensors and then set their state or apply a policy to them.
   For more information, see Using List View to Control Lighting, on page 75.

Similarly, selections can be made from List View for other domains to view the summary details and to apply Policies to the sensors.

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Using List View to Control Lighting

You can select light sensors in List View and then control the selected sensors directly or apply a policy to them. To use List View to configure individual sensors, take the following steps:

1. Enable the Lights module and open List view.
   For more information, see Getting Lighting Information in List View, on page 74.

2. Select one or more light sensors by selecting the corresponding check boxes.
   The summary banner provides Change State, Policies/Events and Clear Selection buttons.
   - To change the current selection, select individual check boxes or clear them as necessary.
   - To clear the current selection entirely, click the Clear Selection button. Set a new selection before going to the next step.

3. Control selected lights directly or apply a policy to them.
   To control the selected lights directly, click the Change State button. This displays a pop up window to drag the slider and change light intensity. You can also toggle the button between On and Off states.
   To apply a policy to the selected lights, click the Policies/Events button. For more information, see Policies and Events, on page 81.
Using List View to Control Lighting

**Figure 111: Lighting Control**

**Figure 112: Change in Light Intensity**
CHAPTER 4

Using the Alerts

• Viewing the system Alerts, on page 77

Viewing the system Alerts

Alerts are system messages which get generated when incidents like specified threshold values reached, accident, traffic congestion occurs. For details, see section Alerts: System-Actionable Incidents, on page 122. Users can view the alerts from Notification tray see Notifications: Informational Messages, on page 121, Map View see SOP section Instances, on page 133 and from within the Alert Page of the dashboard at any time. You can use this Alert Page to view alert incident details corresponding to selected modules in dashboard.

The following search criteria are used to view the alerts:

• Module: You can use Module criteria to view the various alerts associated for selected module in dashboard, such as Environment, Fault, Mobility, Parking, Safety and Security, and Traffic

• Sort By: You can use this Sort By criteria to view the alerts sorted by time set, such as Time Set (new set) and Time Set (old set)

• Display Alert: You can use Display Alert criteria to view different alerts for accident, app, camera health, citizen alert, and crime.

• Alert Threshold: You can use Alert Threshold criteria to view alerts for several levels of severity such as L1, L2, L3, L4, L5 indicating Highest to Least Severity.

• Alerts Timespan: You can use Alerts Timespan criteria to view alert in real-time, last 24 hours, last 2 days, and last 3 days

Before you begin

Log into the dashboard; see Logging into the Dashboard, on page 2

Step 1

To view alerts, click the Alert tab.

The Alert panel appears by default
Step 2

Select the module name from the Module drop-down for which you want to view alerts and then select the following search criteria:

- Select the Sort By from drop-down
- Select the Display Alert from drop-down
- Select the Alerts Threshold from drop-down
- Select the Alert Timespan from drop-down

The Alert panel appears displaying Severity Level, Alert Timespan, Alerts/Incident details for the selected module on the dashboard. You can view Dismiss, Take Action, Update Severity, and More Info in the right side of the dashboard to perform the following operations:

- **Dismiss**: You can use Dismiss to cancel an incident associated with alert.
- **Take Action**: You can use Take Action to select a Standard Operating Procedure to deal with alert.
- **Update Severity**: You can use Update Severity to modify the severity of incident associated with alert.
- **More Info**: You can expand More Info to view additional incident information associated with alert.
**Step 3**  
Click the **Reset** button.  
The page resets to a default Alert page.
Policies and Events

- Policies, on page 81
- Policies Page, on page 81
- Parking Policy, on page 92
- Lighting Policy, on page 104
- Events Page, on page 111

Policies

A policy is a set of rules that control the behavior of infrastructure items. These rules can be "Default" which are provided by the system or "custom" which are added by the user. A policy can be applied as per following order of priority:

- **Default**: The default behavior that is always in effect until a higher-priority policy type supersedes it. For example, the default parking policy might make a particular parking space always available at a price of one dollar per hour, but a time-based policy could modify that pricing or availability at specific times of day or on specific days of the week.

- **Time-based**: The policy is activated by a time-based condition. For example, a time-based policy might supersede the default policy to raise the price of parking from 7 am to 7 pm on business days, and to allow free parking on Sundays and holidays. A variation is a duration-based policy, such as one that imposes a two-hour maximum on the amount of time a user can occupy a parking space.

- **Event-based**: The policy is activated by input from a sensor. For example, a sensor that monitors a parking space can activate the policy that shows the space as occupied, charges parking fees and issues parking violations.

- **Manual override**: The policy is overridden manually by an operator or by an administrator. For example, an operator might enforce a "no parking zone" policy manually to facilitate road repairs.

Policies Page

The Policies page provides tools for creating and managing Default policies and Custom policies.
Default Policies

Viewing a Default Policies Page

To view a policy page, click the Policies tab on the dashboard.

The default policies page appears. For information on Custom Policies, see Custom Policies, on page 87

Information on the Default Policies Page

Each entry on the Default Policies page provides the following information about a policy:

- **Policy Name**: The name that identifies the policy on the dashboard. It is recommended that you name policies as descriptively as possible, to enable the other users to easily understand the functionality of the policy.

- **Domain**: The module that provides the policy functionality, such as the Parking or Light module. The domain name list is populated based on the modules over which the instance has access. Although multiple policies can interact to provide complex behaviors, each individual policy in the set works with exactly one module. For example, a single event (such as a sporting event) might invoke policies that change lighting, traffic and parking policies, but each such policy works with exactly one module.

- **Policy Type**: The type/kind of the policy. Lighting Policy types are Light Daylight Harvesting, Light Intensity, Light Proximity Based Policy. For information on these policies, see Parking Policy types are Fare, Standing Zone, No Parking, Reserved Parking, Handicapped Parking, Loading Zone Policy.

Searching for Policies

When there are numerous policies in the system, it may be more convenient to search for a policy than to browse for it.

To search for a policy by name, type any part of the name into the Search box at the upper-left corner of the Policies page; matches and partial matches appear immediately. Search terms are not case-sensitive; for example, typing "in" as your search term can find the "Thursday Parking" and "Park In Stadium" policies. To clear the search terms and view all policies, click the X button at the right of the Search box.

The current release supports searching by policy name only. You cannot search for policies by type or by module.
Selecting and Deselecting Policies

You can select policies for exporting them to a file; subsequently, you can use this file to import the policies into another dashboard.

- **To select an individual policy**, select the checkbox corresponding to the policy.
- **To deselect an individual policy**, clear the checkbox corresponding to the policy.
- **To select all policies**, select the check boxes that appear next to the Policy Name column title.
- **To deselect all policies**, clear the check boxes that appear next to the Policy Name column title to remove the checkmark from all check boxes on the page. When no check boxes are selected, no policies are selected.

Creating a Policy

To create a default policy, click the Create button and respond to prompts of the policy-creation wizard. Details vary according to the type of policy that is being created, but the overall policy-creation workflow is as follows:

1. Click the Create button on the Policies page. The Create Policy dialog box appears.

   ![Figure 116: Select Policy](image)

2. Select the Default Policies radio button and then click the Create button.

3. Specify whether the default policy governs one of the module Light or Parking or any other module/domain over which the instance has access and then click the Next button.

   ![Figure 117: Create Default Policy Module](image)

4. Select the Light Policy Type radio button and then click the Next button.
5. Add rules defining the enforcement actions that the policy provides.

For example, the rules for a parking policy might specify dates and times that no parking is allowed, varying prices the times when parking is allowed, and so on. The rules for lighting could specify conditions that turn streetlights on or off, as well as other conditions that brighten lighting for enhanced safety, or conditions that dim lighting for energy savings.

6. Review the rule set before finalizing the policy and then click Next.

7. Specify a unique name for the policy to easily identify that on the dashboard. The policy is now ready for use in dashboard.
Creating a policy does not apply it. The policy must be associated with one or more locations that it governs. For example, a parking policy might be applied to all parking spaces in the city, or to specific parking lots, or even to specific spaces only. For more information, see

### Viewing a Summary

To view a summary of the rules that a particular policy provides, click the document icon that appears at the far-right end of the row that contains the policy on the Policies page. A rules-summary dialog box like the one in the following figure appears.

**Figure 122: Policy Summary**

![Policy Summary](image)

### Editing a Policy

To edit a policy from the Policy page, click the Edit icon and respond to prompts of the Edit Policy wizard. Details vary according to the type of policy that is being edited, but the overall edit-policy workflow is as follows:

1. Click the Edit icon on the policies page
2. The Edit Policy dialog box appears and then click + to edit the rules set for the selected policy name
3. Make changes to the value, date, and time rule set for selected policy and then click Next
4. Review the rule set before saving the policy and then click Save.

Deleting a Policy

To delete a policy from the Policy page, click the trash icon that appears at the far-right end of the row that contains the policy on the Policies page. To proceed, click the Delete button.

Importing a Policy

You can import a previously exported policy file as follows:

1. Click the **Import** button at the upper-right corner of the page.
   A standard file-navigation dialog box appears.

2. Select the **.json** file to import and then click the **Open** button.
   A notification indicating success or failure of the import operation appears. If successful, the imported policies are available immediately. You may need to use sorting or navigation controls to find the new policies in the **Policies** list.
Exporting a Policy

You can export one or more policies as a JSON file that you can use to install those policies in another deployment of the dashboard.

1. Click check boxes in the leftmost column of the page to select the policies to export:
   - **To select a policy**, select checkbox corresponding to policy.
   - **To deselect a policy**, clear checkbox to remove the checkmark from the box.
   - **To select all policies or to deselect all policies**, use the checkbox at the very top of the column in similar fashion.

2. Click the **Export** button at the upper-right corner of dashboard page
   
   Your Web browser downloads the selected policies to the location specified in the browser setting.

3. Optionally, use your local desktop tools to change the default name of the exported file to a more descriptive name.

4. The dashboard assigns **policies_downloaded.json** as the default name for a file that contains one or more exported policies. It is recommended that you rename each export file as descriptively as possible, to enable other users of the system to understand the policy functionality that the file provides. Do not change or remove the **.json** filename extension.

Custom Policies

CKC allows users to create their own customized policy. You can use the sample template provided in the application and add your own parameters to create a customized policy.

Viewing a Custom Policies Page

To view a custom policies page, click the **Policies** tab on the dashboard. The default policies page appears by default. For more information on default policies, see Default Policies, on page 82

Click the **Custom Policies** tab. The Custom Policies page appears.

*Figure 127: Custom Policies Page*
Information on the Custom Policies Page

Each entry on the Custom Policies page provides the following information about a policy:

- **Policy Description**: The label tag that you define in the xml file while creating a custom policy is the policy description.

- **Policy Type**: The type of policy. In the current release, this value is always set to Custom Policy.

Searching for Policies

When there are numerous policies in the system, it may be more convenient to search for a policy than to browse for it.

To search for a policy by name, type any part of the name into the **Search** box at the upper-left corner of the Policies page; matches and partial matches appear immediately. Search terms are not case-sensitive; for example, typing "in" as your search term can find the "Thursday Parking" and "Park In Stadium" policies. To clear the search terms and view all policies, click the X button at the right of the Search box.

The current release supports searching by name only. You cannot search for policies by type or by module.

Selecting and Deselecting Policies

You can select policies for purposes of exporting them to a file; subsequently, you can use this file to import the policies into another dashboard.

- **To select an individual policy**, select the checkbox next to its name,

- **To deselect an individual policy**, select the checkbox next to its name,

- **To select all policies**, select the checkbox that appears next to the **Policy Name** column title.

- **To deselect all policies**, clear the checkbox that appears next to the **Policy Name** column title.

Creating a Custom Policy

To create a custom policy, click the **Create** button and respond to prompts that the policy-creation wizard supplies. Details vary according to the type of policy being created, but the overall policy-creation workflow is as follows:

1. Click **Create** on the Policies page. The Create Policy dialog box appears.
2. Select **Custom Policies** radio button
3. Click the **Create** button. The Create Policy dialog box appears with Upload, Cancel and Save options.

*Figure 128: Select Policy*
4. Click **Upload Policy** to upload the policy from your local machine. The format for the xml file can be seen by clicking on any of the available sample template. Make sure the policy you upload should only be in xml, txt files, or you can also click to select the policy file under the **Sample Templates** section to create a custom policy.

5. The Custom Policy will be available to view on the left side of the Create Policy dialog box. Click the **Save** button.

   *Figure 129: Save Custom Policy*

6. The new custom policy will be created successfully and will appear in the list of Custom Policy page.
Editing a Custom Policy

To edit a policy from the Policy page, click the Edit icon and respond to prompts that the edit policy wizard supplies. Details vary according to the type of policy being edited, but the overall edit-policy workflow is as follows:

1. Click the Edit icon on the policies page

2. The Edit Policy dialog box appears and then click the Upload Policy button to browse the new policy or click to select the new template available under the Sample Template section to override the rule set for the current policy and then click Save.

3. On clicking new template under the Sample Templates section, an Edit Policy dialog box appears that asks for your confirmation to override the current policy. Clicking Yes will override the rule set for the selected policy.
4. Review the rule set before saving the policy and then click Save.

The selected policy will be edited successfully and confirming Success message Policy edit done successfully.

Deleting a Custom Policy

1. Click the trash icon that appears at the far-right end. A confirmation dialog box appears.

2. Click Delete

3. The selected policy will be deleted successfully and a confirmation message will be seen.
Parking Policy

An Operator can create, modify, delete and apply a variety of parking policies to parking lots and individual spaces. The system provides built-in options as well as the ability to create customized policies.

- **Creating** a policy defines the rules that the policy enforces, such as the conditions under which the policy allows or forbids parking, and the price of parking.

- **Applying** a policy specifies the locations at which the system enforces that particular policy. Locations could include all parking spaces, or some subset, such as all spaces in a region, or even individual spaces. For example, individual spaces might be designated as handicapped parking or as no parking.

The Policies page provides access to tools that an Operator can use to manage any policy type, including parking policies.

There are multiple types of default parking policies which can be created and applied.
Special-Use Parking Policies

An Operator can assign specialized privileges to specific parking spots. For example, handicapped parking may be allowed extra time, occupancy of a loading zones or standing zones may be restricted to a specific amount of time, individual spots can be marked as no-parking or reserved parking, and so on.

Parking Price Plans

The system provides several preset pricing plans for parking. Operators can also define custom pricing plans. The following preset pricing plans are available under Parking Fare Policy type:

- Time-based fares: Parking fares vary according to timestamp. For example, early morning rates and late night rates could be low, and rates for peak-usage times could be high. Parking might be free of charge on weekends and charged by the hour during weekdays. Operators can specify the time period during which a specific rate applies.
- Time-based availability: Parking facilities are available only at specified times. For example, parking allowed only between 6-9 PM. Operators can specify the parking areas and time periods during which parking is allowed or forbidden.
- Maximum duration availability: Users cannot park longer than a specified maximum amount of time. For example, the user might be allowed to park for a maximum of one hour.

An operator can also define a custom pricing policy. One example of custom pricing might be an event-based policy that increases the parking price automatically when occupancy reaches 80 per cent.
Creating a Default Parking Policy

There are multiple types of default parking policy types which the system provides. Below are the steps to create a default parking policy.

1. Choose Policies from the top navigation menu at the top of the Web GUI.
   The Policies page opens. For more information, see Understanding the User Interface, on page 27.

2. Click the Create button on the Policies page.
   The Create Policy dialog box presents default policies domain choices for the domains which are accessible to the logged in operator.

   Figure 135: Specifying the type of domain that the policy governs

3. Select Parking and then click the Next button.
   The Parking Policy Type dialog displays various types of policies.

   Figure 136: Specifying the Parking Policy Type

   Note: The choices that appear in the Parking Policy Type dialog box are predefined by the Administrator according to a plan that the City has approved.

4. Select No Parking option and then click the Next button.
5. To define the time and days at which this No Parking rule applies, click the + sign in the **No Parking Rule** button.

Controls for setting the date and time appear. In the next step, you'll use these controls to define the times at which this particular policy does not allow parking.

6. Specify the day of the week and time of day at which to begin enforcing this rule.

By default, the No Parking rule is in effect every day, starting at midnight (00:00 AM) on the date you apply the rule. If this is sufficient, skip all of the sub-steps in this numbered step and go to the next numbered step. If you want to specify different dates and times, follow the substeps in this step to set multiple rules that govern the enforcement of the No Parking policy. For more information, see "Combining Rules to Create Complex Behaviors."

1. Use the pull-down menu to choose a day of the week.

2. Use the pull-down menu marked with the clock icon (to the right of the menu) to set the time of day at which to begin enforcing this rule. This pull-down menu uses a 24-hour clock; for example, 6:00 PM is represented as 18:00.

The following figure shows rule settings that specify "no parking every Friday at 6:00 PM." This rule remains in effect until another rule supersedes it.

7. Create additional rules as necessary to specify the No Parking policy completely:
   1. Click the Add a new rule button
      A list of available rule types appears.
   2. Click the No Parking item in the list of rule types.
      The new rule appears in the dialog box.
   3. Click the + icon that appears in the rule you just added.
      Controls for configuring the rule appear. These controls vary according to the type of rule you added. For example, a fare rule presents controls for specifying an hourly rate as well as the dates and times at which to apply that rate.
   4. To add another rule, repeat steps a) through c); otherwise, go to the next step.

8. After adding all the rules to the policy, click the Next button.
   The summary page (4 of 5) summarizes the current ruleset.
   
   Figure 140: Summary of rules
   
   9. Click the Next button.
      The Policy Name field appears.
      
      Figure 141: Naming the policy
      
      10. In the Policy Name field, type the name that is to identify this policy in the CKCWeb GUI.

      Important

      You cannot change the name of the policy after saving it. Descriptive names like "No parking Friday 6pm" are preferable to less-descriptive ones like "Friday night parking policy."

      11. Click Save.
Creating a Multi-Rule Parking Policy

A policy can contain multiple rules; for example it might contain multiple fare rules that change the price of parking according to the time of day or day of week, and it might have "no parking" rules that forbid parking entirely at certain times or on certain days. All rules within a single policy must operate on the same module; for a single policy cannot provide both parking and traffic rules. However you can create separate policies of different types that operate on the same locations at the same time. For example, you might create a parking policy that forbids parking in a particular location at 9pm on Fridays and you could also create a lighting policy that turns on the streetlights in that location at that time.

To create a multi-rule policy, simply continue adding rules to its Rules dialog before finalizing your policy, as follows:

1. Complete steps 1-7 in Creating a Default Parking Policy, on page 94.
2. Click the Add a new rule button.
3. Choose Fare Rule or No Parking Rule.
4. Configure controls that define the terms of the parking rule.
5. Repeat steps 2-4 of this procedure as necessary to add and configure additional rules.
6. When you are finished adding rules to the policy, click Continue.

   The policy summary appears.
   • If you are satisfied with the rules that the policy provides, click Continue and then go to the next step in this procedure.
   • If you want to modify the policy's ruleset, click Back, make changes, and then return to this step.

7. Supply a name for the policy in the Policy Name Field and then click the Save button.

   You cannot change the name of the policy after saving it. Descriptive names like "No parking Friday 6pm" are preferable to less-descriptive ones like "Friday night parking policy."

Combining Rules to Create Complex Behaviors

You can combine rules to create sophisticated policy-enforcement behaviors. For example, you can add multiple Parking Rules to allow parking at some times, no parking at others, and changes of fare during the times parking is allowed:

   • To specify a range of time, set the start time for the rule to a specific day of the week and time of day. This enforcement period remains in effect until another rule overrides it.

For example, if you specify no parking beginning Thursday at 10 am it would remain in effect until, for example, another policy specifies that parking is $2/hour beginning at 9 am on Fridays. That rule remains in effect until another policy takes effect, even if the day of week changes at midnight. Continuing the example, if these two rules were the only ones that governed this particular parking space, the effective policy would be "no parking Thursday 10 am until $2 parking Friday at 9am. Parking would remain allowed at $2/hr until the following Thursday at 10 am."
• To specify "no parking, always" you could create a rule that is "No Parking - every day - 00:00:00" and it would stay in effect indefinitely. Another way to achieve the same result would be to choose a specific date and time at which the No Parking rule becomes effective, such as Monday at 00:00:00. As long as no other rule supersedes this one, this rule would remain in effect indefinitely.

• To configure no parking in the mornings, and parking allowed in the evenings, you could create the following rules:

  No Parking - Every day - 00:00:00
  Fare rule - Every day - 18:00:00

Similarly, you can add different kinds of rules to a single policy. For example, you might have a default fare-based parking policy that is overridden by event-based or time-based policies that change the parking rate or disallow parking entirely.

### Applying a Default Parking Policy

You can apply a previously created parking policy as the default policy for selected locations in Map View. You can apply the policy to any valid selection. For example, you can select multiple parking lots, or individual spaces in a single lot, or individual spaces on the street, but a single selection cannot encompass all of these items. To apply the policy to selections of different types, you'll need to complete this procedure once for each type of selection. For example, you can follow this procedure once to apply a policy to multiple parking lots. If you then want to apply the policy to individual spaces in on-street parking, you'll need to follow this procedure again to apply the policy to that selection. Similarly, you could follow this procedure to apply a default policy to individual spaces within a single parking lot.

To apply a default parking policy to a selection in Map View, take the following steps.

#### Before you begin

- The Parking module is enabled in Map View. For more information, see "Modules" in Understanding the User Interface, on page 27.
- The policy to apply is available on the Policies page. For more information, see Applying Parking Policy to Locations, on page 100.

#### Step 1

In Map View, select parking lots or parking spaces for which you intend to set a new default policy.

For more information, see Getting Details from Map View, on page 37.

#### Step 2

Click the Policies/Events button.

The Policies/Events dialog box displays the current selection, along with any policies that may be in effect for that selection now. The Policies/Events dialog box also provides controls that enable you to choose a parking space policy to set as a default policy or a date-based policy.
Step 3  Choose a parking policy from the Select Parking Space Policy pull-down menu. The current value of the menu reflects your choice.

Step 4  Choose Default Parking Policy from the pull-down menu next to the Select Parking Space Policy menu. The current value of the menu reflects your choice.

Step 5  After reviewing your choices to ensure that they are correct, click the Apply button.

The Policies/Events dialog box displays the new default policy for the selected spaces. If a default parking policy was already in effect for any parking spaces in the selection when you clicked the Apply button, a dialog box like the one in the following figure prompts you to confirm your intention to overwrite that default policy. Click Yes to proceed to replace the current default policy with the new one; click No to return to the Policies/Events dialog box. When you are satisfied with your choices and you click Yes in the overwrite confirmation dialog box, go to the next step.

Figure 143: Overwrite default confirmation dialog

Step 6  Close the Policies/Events dialog box by clicking the X in its upper-right corner.
Applying Parking Policy to Locations

The operator can apply a policy to specific parking lots or parking spaces.

In addition to these location-based criteria, an Operator can define time-based criteria that apply a parking policy. For example, the operator can specify a time period during which the policy is applied, such as indefinitely, for a year, for a week, and so on. Time-based criteria can specify policy according to times of day, days of the week, holidays, and so on. Another aspect of time-based criteria include defining maximum occupancy durations, such as two-hour parking.

Using List Views to Apply Parking Policy

The Operator can view the parking spots in a region in a list view that enables filtering, sorting, and selection of individual parking spots for the purpose of applying policies. You can use these list views to find parking and lighting sensors easily. You can also configure sensors from within the list. For example, to list all parking sensors and then use the list view to configure individual sensors, perform the following steps:

Enable the Parking Module.

For more information, see Enabling or Disabling Module Output in Map View, on page 33.

All of the parking sensors appear in list view.

Select one or more parking sensors by selecting the check box.

The summary banner provides a Policies/Events button and a Clear Selection button.

![Figure 144: List View of parking sensors](image)

<table>
<thead>
<tr>
<th>Name</th>
<th>Domain</th>
<th>Status</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spot_BU_Berlin.M003.001.001.FS.001</td>
<td>Parking</td>
<td>Occupied</td>
<td>Cleverciti</td>
</tr>
<tr>
<td>Spot_BU_Berlin.M003.001.001.FS.002</td>
<td>Parking</td>
<td>Occupied</td>
<td>Cleverciti</td>
</tr>
<tr>
<td>Spot_BU_Berlin.M003.001.001.FS.003</td>
<td>Parking</td>
<td>Occupied</td>
<td>Cleverciti</td>
</tr>
<tr>
<td>Spot_BU_Berlin.M003.001.001.FS.004</td>
<td>Parking</td>
<td>Occupied</td>
<td>Cleverciti</td>
</tr>
<tr>
<td>Spot_BU_Berlin.M003.001.001.FS.005</td>
<td>Parking</td>
<td>Occupied</td>
<td>Cleverciti</td>
</tr>
<tr>
<td>Spot_BU_Berlin.M003.001.001.FS.006</td>
<td>Parking</td>
<td>Occupied</td>
<td>Cleverciti</td>
</tr>
<tr>
<td>Spot_BU_Berlin.M003.001.001.FS.008</td>
<td>Parking</td>
<td>Occupied</td>
<td>Cleverciti</td>
</tr>
<tr>
<td>Spot_BU_Berlin.M003.001.001.FS.009</td>
<td>Parking</td>
<td>Occupied</td>
<td>Cleverciti</td>
</tr>
</tbody>
</table>

Click the **Policies/Events** button.

The **Policies/Events** dialog box displays the current selection, along with any policies that may be in effect for that selection now. The **Policies/Events** dialog box also provides controls that enable you to choose a parking space policy to set as a default policy or a date-based policy.
Figure 145: Existing Policies View

Configure the parking policy to apply to the selection.
For more information, see Parking Policy, on page 92
To save your changes, click the Apply button.
The selected infrastructure items reflect the new settings immediately.

Figure 146: Applied Policies

Applying a Date-Based Parking Policy

You can apply a previously created parking policy as a date-based policy for selected locations in Map View.
You can apply the policy to any valid selection. For example, you can select multiple parking lots, or individual spaces in a single lot, or individual spaces on the street, but a single selection cannot encompass all of these items. To apply the policy to selections of different types, you'll need to complete this procedure once for each type of selection. For example, you can follow this procedure once to apply a policy to multiple parking lots. If you then want to apply the policy to individual spaces in on-street parking, you'll need to follow this
procedure again to apply the policy to that selection. Similarly, you could follow this procedure to apply a default policy to individual spaces within a single parking lot.

To apply a date-based parking policy to a selection in Map View, take the following steps.

**Before you begin**

- The **Parking** module is enabled in **Map View**. For more information, see "Modules" in **Understanding the User Interface**, on page 27.
- The policy to apply is available on the **Policies** page. For more information, see **Policies Page**, on page 81.

**Step 1** In Map View, select parking lots or parking spaces for which you intend to set a new date-based policy.

For more information, see **Getting Details from Map View**, on page 37.

**Step 2** Click the **Policies/Events** button.

The **Policies/Events** dialog box displays the current selection, along with any policies that may be in effect for that selection now. The **Policies/Events** dialog box also provides controls that enable you to choose a parking space policy to set as a default policy or a date-based policy.

**Figure 147: Policies/Events dialog box**

**Step 3** Choose a parking policy from the **Select Parking Space Policy** pull-down menu.

The current value of the menu reflects your choice.

**Step 4** Choose **Date-Based Policy** from the pull-down menu next to the **Select Parking Space Policy** menu.

Controls for choosing the start and end dates of the policy enforcement period appear.

**Figure 148: From/To controls**

**Step 5** Use the **From** controls to specify the date and time at which the policy-enforcement period begins:

1. Click the calendar icon in the **From** control.

   A date-picker control like the one in the following figure appears.
2. Scroll the month, day, and year columns in order to set the desired date.

3. To set the time of day at which the enforcement period begins, select a column (hours, minutes, or seconds) in the clock control and type to enter its value. Alternatively, you can select a column and use the up-down arrows to set time.

**Step 6**

Use the **To** controls to set the date and time at which the enforcement period ends.

When you have finished configuring the **From** and **To** controls, they display the dates and times at which the enforcement period for this date-based policy starts and ends. For example, the following figure depicts a date-based policy that begins at 6:00 pm on December 31, 2015 and ends at 6:00 AM on January 2, 2016. Note that the policy has not yet been applied: it does not appear in the list of parking lots and spaces that appear in the Policy/Events dialog box.

**Figure 150: Setting policy dates for New Year's holiday period**

**Step 7**

Click **Apply**.

The **Policies/Events** dialog box displays the new date-based policy for the selected spaces. Sorting results on the Policy Name or Policy Type fields may make it easier to verify that your new policy has been applied to the entire selection as you intended.

**Step 8**

Close the **Policies/Events** dialog box by clicking the X in its upper-right corner.
Lighting Policy

An Operator can create, modify, delete and apply a variety of lighting policies to lighting groups and individual light sensors. The system provides built-in options as well as the ability to create customized policies.

- **Creating** a policy defines the rules that the policy enforces, such as the conditions under which the light intensity of the sensors can be changed, thus controlling the lighting of various locations.

- **Applying** a policy specifies the locations at which the system enforces that particular policy. Locations could include lighting group, or individual lighting sensors etc. For example, light intensity within a specific radius can be controlled when an object is detected. The policies can be applied similar to Parking policy application. For more details, refer Using List Views to Apply Parking Policy, on page 100

The Policies page provides access to tools that an Operator can use to manage any policy type, including lighting policies. You can create time-based and event-based lighting policies very similarly to the workflows used to create similar kinds of parking policies. For more information, see the workflows for creating parking policies, and apply them to lighting groups and lighting sensors in the Lights module.

Types of default Lighting policies

Default or built-in lighting policies are of three types

- **Light Daylight Harvesting Policy**: This policy provides a default option of changing light sensor's intensity during daylight. You can multiply the existing intensity by a multiplier depending on the ambient light illuminance.

- **Light Intensity Policy**: The Light Intensity can be changed to a specific value at specific time of the day.

- **Light Proximity Based Policy**: The Light intensity changes within a certain radius when an object is detected. You can specify the intensity to which the light should be set once an object is detected at specific time of the day.

Creating Light Daylight Harvesting Policy

To create a default lighting policy under **Light Daylight Harvesting Policy** type, perform the following steps

**Before you begin**

Before attempting this procedure, verify the following:

- You are logged into the CKC dashboard as an **Operator**

- The **Lighting** module is enabled in **Map View**. For more information, see "Modules" in Enabling or Disabling Module Output in Map View, on page 33.

**Step 1**
Click **Policies** from the top navigation menu.

The **Policies** page appears. For more information, see Policies Page, on page 81

**Step 2**
Click **Create** on top right of the Policies page

**Create Policy** window appears.
Step 3  Select Default Policies option.

*Figure 151: Create Policy window*

Step 4  Click Create

Create Default Policy window appears.

Step 5  Select Lighting domain.

*Figure 152: Default Lighting Policy*

Step 6  Select Next

Default Lighting Policy types appear.

Step 7  Select Light Daylight Harvesting Policy as lighting policy type.
Step 8  
Click **Next**  
*Rules* window appears

Step 9  
Click **+**

Step 10  
Enter the values for Max Intensity Percent, Intensity Multiplier, Target Ambient Illumination, Start Time and End Time.
Step 11  Click Next

Step 12  Click Next

Step 13  Enter Policy Name
**Figure 157: Saving Policy**

![Create Default Policy (5 of 5)](image)

**Step 14**  
Click **Save**  
Success message gets displayed.

**Figure 158: Creating Light Intensity Policy**

Creating **Light Intensity Policy**  
To create a default lighting policy under *Light Intensity Policy* type, perform the following steps

**Figure 159: Creating Light Intensity Policy**

![Create Default Policy (2 of 5)](image)
Before you begin

- You are logged into the CKC dashboard as an operator
- The Lighting module is enabled in the Map View

**Creating Light Proximity Based Policy**

To create a default lighting policy under **Light Proximity Based policy**, perform the following steps:

1. Select Policies on the top navigation menu
2. Click Create
3. Select Default Policies
4. Click Create
5. Select Lighting domain
6. Select Lighting Intensity Policy
7. Click +
8. Drag the slider to change light intensity value
9. Enter the days and time value
10. Click Next
11. Check the rule summary and click Next
12. Enter Policy Name and click Save.
Before you begin

Before attempting this procedure, verify the following:

- You are logged into the dashboard as an Operator
- The **Lighting** module is enabled in the Map View. For more information, see "Modules" in **Enabling or Disabling Module Output in Map View**, on page 33

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Click <strong>Policies</strong> on the top navigation menu of the dashboard.</td>
<td>Click <strong>Create</strong> on top right corner of the Policies page.</td>
<td>Select <strong>Default Policies</strong> in the Create policy window.</td>
<td>Click <strong>Create</strong>.</td>
<td>Select <strong>Lighting</strong> domain.</td>
</tr>
</tbody>
</table>
Step 6: Select policy type as *Light Proximity Based Policy*

Step 7: Click +

Step 8: Drag the slider to set the Default Intensity Level and Triggered Intensity level.

Step 9: Enter the Trigger effect duration, Start, End time and radius.

Step 10: Click Next

Step 11: Check the rule summary and click Next

Step 12: Enter policy name and click Save.

*Figure 163: Summary of Light Based Proximity Policy*

---

**Events Page**

An Event is a set of a trigger and an action. This set can be a cross domain combination. For e.g.; Change the light intensity when parking spot is occupied. Certain events can be configured to send notifications to the operator when a trigger condition is met. Events page provides tools for creating and managing events. To view the Events page, choose Events from the top navigation menu (see Understanding the User Interface, on page 27.)
Information on the Events Page

Each entry on the Events page provides the following information:

- **Event Name**: The name that identifies the event in the dashboard Web GUI. It is recommended that you name events as descriptively as possible.

- **Event**: The Domain-Trigger that would lead to the action.

- **Action**: The change in behavior that the system should display once trigger condition is met.

Following is the list of default Event triggers and actions available:

<table>
<thead>
<tr>
<th>Module</th>
<th>Triggers Available</th>
<th>Actions Available</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Lot</td>
<td>Parking lot full</td>
<td>Send notification</td>
<td>Inform system users</td>
</tr>
<tr>
<td></td>
<td>Parking utilization changed</td>
<td>Scale fare</td>
<td>Raise price when utilization is high; lower it when utilization is low.</td>
</tr>
<tr>
<td>Parking Spot</td>
<td>Parking spot occupancy status changes to Occupied</td>
<td>Change the intensity of the light</td>
<td>Increase lighting when a parking space is occupied.</td>
</tr>
<tr>
<td></td>
<td>Parking spot occupancy status changes to Vacant</td>
<td>Lighting Near By Area</td>
<td>Change the Intensity of Light within specified radius when the mentioned event is detected.</td>
</tr>
<tr>
<td>Module</td>
<td>Triggers Available</td>
<td>Actions Available</td>
<td>Usage</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Traffic</td>
<td>Congestion changes to high, medium or low</td>
<td>Set Parking zone in radius</td>
<td>Set parking zone within specific radius when congestion changes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scale Parking Fare</td>
<td>Change parking rates with change in congestion state</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flash Light</td>
<td>Flash lights within a specified radius when an accident occurs</td>
</tr>
<tr>
<td>Occurrence of Accident</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Change in Ambient Temperature</td>
<td>Change the intensity of the light</td>
<td>Change the intensity of light within specified radius when ambient temperature crosses the mentioned threshold value.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Notify Threshold reached</td>
<td>Send a notification to operator when threshold value is reached.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in Ambient Light</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change Light Intensity for Ambient</td>
<td>Change the intensity of Ambient light to specified value within specified radius when ambient light crosses the mentioned threshold value.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in Threshold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module</td>
<td>Triggers Available</td>
<td>Actions Available</td>
<td>Usage</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Region</td>
<td>Change in Parking, Traffic, Environment parameters</td>
<td>Lighting Near By Area, Parking fare scaling or setting parking zone</td>
<td>Change the Intensity of Light within specified radius or scale the parking fare or restrict the parking zone when change in temperature, parking or ambient light is detected in a region.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detection of Event</td>
<td>Flash Light</td>
<td>Flash lights within a specified radius when an accident occurs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set Parking Status</td>
<td></td>
<td>Set parking zone within specified radius when the mentioned event is detected.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting Near By Area</td>
<td></td>
<td>Change the Intensity of Light within specified radius when the mentioned event is detected.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROI Over Crowding Trigger With Location</td>
<td></td>
<td>Create Event For Mobility ROI</td>
<td>A congestion or overcrowding event is created when the count of specified vehicle or pedestrian reaches the threshold value.</td>
</tr>
</tbody>
</table>

### Searching for Events

When there are numerous Events in the system, it may be more convenient to search for an event than to browse for it. The events can be searched by name, trigger condition, action.

To search for an event, type out the name or trigger condition or action into the Search box at the upper-left corner of the events page; matches and partial matches appear immediately. Search terms are not case-sensitive; for example, typing "in" as your search term can find the events which have 'in" in their Event names, trigger or in action. To clear the search terms and view all events, click the X button at the right of the search box.

### Selecting and Deselecting Events

You can select events for purposes of exporting them to a file; subsequently, you can use this file to import the events into another CKC instance.

- **To select an individual event**, select the check box next to its name,
- **To deselect an individual event**, clear the check box next to its name,
- **To select all events**, select the check box that appears prior to the Event Name column title,
• To deselect all events, clear the check box that appears prior to the **Event Name** column title.

**Viewing a Summary of Event Rules**

To view a summary of the event action that a particular event provides, click the document icon that appears at the far-right end of the event name on the Events page. A summary dialog box like the one in the following figure appears.

*Figure 165: Event rules summary*

![Summary dialog box](image)

**Creating an Event**

To create a new event, click **Create** and respond to prompts that the event-creation wizard supplies. Details vary according to the type of event being created, but the overall event-creation workflow is as follows:

1. Click **Events** on the dashboard GUI.
   
   The **Events** page opens. For more information, see Understanding the User Interface, on page 27.

   *Figure 166: Create button on Events Page*

   ![Create button](image)

2. Click **Create** on the **Events** page.

   *Figure 167: Create Event*

   ![Create Event](image)

3. Specify the domain **Parking, Region, Traffic, Environment**

4. Add action that the event should generate.
5. **Figure 169: Selecting Event Action**

   Review the rule set before finalizing the event.

   **Figure 170: Review of Action Rule**

6. Save the event with a unique name that identifies it in the CKC Web GUI.
Editing an Event

To edit an existing event, click the pencil icon that appears next to the event name on the Events page, and respond to prompts that the event-editing wizard supplies. Overall workflow for editing an event is as follows:

1. Select Events from the top navigation menu of the CKC Web GUI. The Events page opens. For more information, see Understanding the User Interface, on page 27.

2. Click the pencil icon that appears corresponding to the event that you want to edit.

The Edit Event wizard displays the Domain - Trigger dialog box.

The controls in this dialog box reflect the current values of the event you chose to edit:

- The leftmost drop-down menu identifies the Domain (Parking Spot, Parking Lot, Region, Traffic or Environment) that the event governs.
- Other controls in the dialog box describe the trigger condition and value that activate this event.

3. To change the trigger that results in action, choose a new value from the leftmost pull-down menu in the Edit Event dialog box.

   Please note the existing domain cannot be changed while editing an event.

4. Change the values of other trigger controls in the dialog box and then click Next.

   The Action dialog box appears.
Figure 173: Action dialog box

5. Select the action that should be taken when trigger condition is met and then click the Next button.

The Summary page describes your new event. Review the summary to determine whether the trigger and action are appropriate.

6. Save your changes using Save

The event gets edited successfully.

Deleting an Event

To delete an event from the Events page, click the corresponding trash can icon on the Events page. To proceed, click Delete. The event gets deleted successfully.

Figure 174: Deleting an Event

Importing an Event

You can import a previously exported event file as follows:

1. Click the Import button at the upper-right corner of the page.

A standard file-navigation dialog box appears.

2. Select the .json file to import and then click the Open button.

A notification indicating success or failure of the import operation appears. If successful, the imported events are available immediately. You may need to use sorting or navigation controls to find the new events in the Events list.
Exporting an Event

You can export one or more events as a JSON file which can be used to install the events in another deployment of the dashboard.

1. Click check boxes in the leftmost column of the page to select the events to export:
   - **To select an event**, select checkbox corresponding to an event.
   - **To deselect an event**, clear the checkbox.
   - **To select all events or to deselect all the events**, use the checkbox at the top of the column in similar fashion.

2. Click the **Export** button at the upper-right corner of dashboard page
   Your Web browser downloads the selected events to the location specified in the browser setting.

3. Optionally, use your local desktop tools to change the default name of the exported file to a more descriptive name.

4. The dashboard assigns `events_downloaded.json` as the default name for a file that contains one or more exported events. It is recommended that you rename each export file as descriptively as possible, to enable other users of the system to understand the event functionality that the file provides. Do not change or remove the `.json` filename extension.
System Messages: Notifications, Alerts and Alarms

In a smart city, there will be many cases which may require human intervention to take appropriate actions. Such cases are called Incidents. CKC Incidents generate Notification, Alert and Alarm messages that are visible within the CKC UI and the Enforcement Officer Mobile App. This Guide refers to all such messages as "system messages."

- Notifications: Informational Messages, on page 121
- Alerts: System-Actionable Incidents, on page 122
- Alarms: External Incidents, on page 124
- Viewing Unread System Messages, on page 124
- Sorting and Filtering System Messages, on page 126

Notifications: Informational Messages

A Notification is an informational message that CKC generates. For example, whenever a vehicle enters or leaves a parking place, the sensor in that location generates a notification. You can ignore notifications without consequence. The primary purpose of a notification is to generate raw data for reporting purposes.

Following occurrences generate an Info or Informational message:

- Environment: Any change in values
- Parking: Messages on Parking areas becoming full, empty, updates in Parking spaces, spots, areas, Parked Vehicle event, Parking violations cleared
- Traffic: Incident cleared
- Light: Light intensity level changes or reliability changes
- Safety and Security: Any update such as Suspicious object cleared, other updates in severity.
- Urban Mobility: Any update in Crowd status, Speeding Violation cleared.

Each new notification is visible under the Notifications icon immediately upon generation. The bell icon in the CKC UI banner displays the number of unread notifications. Clicking the bell displays the most recent notifications and resets the counter.
Alerts: System-Actionable Incidents

An Alert identifies an incident that is actionable within the CKC infrastructure.

Process of Alerts generation
The following sequence of steps explains the process of Alerts generation in CKC:

1. Threshold values are configured or Policies are created by the user.
2. Incidents like Environment Threshold value reached or SnS Fire/Smoke occurs or Policy Violation occurs.
3. Alert is generated by southbound provider on occurrence of incident as mentioned above.
4. Alert reaches CKC and Dashboard gets notified through Web Socket.
5. Dashboard displays the Alert in Notification Tray/Alerts Page/Map View. For details on viewing system alerts, refer Viewing the system Alerts, on page 77
6. Action on Alert is taken by the user through configured SOP. For details, refer SOP, on page 129

Following incidents of different domains can generate an alert on the Dashboard:
• Environment: Threshold Values reached.

• Parking: No Parking Zone Violations, Parking Fare Expended Violation, Parking Potential Expiry, Limit Exceeded Violation, Poorly Parked Violation, Potential Fare Expiry

• Traffic: Accident, Vehicle Stopped, Congestion.

• Safety and Security: Camera Health, Citizen Alert, Person Identified, Suspicious Object detected, Fire and Smoke, Fire, Garbage, Graffiti, Crime, Influencer, Intrusion, Keyword, Loitering, Slip and Fall, Overstay, Panic, Queue, Sentiment, Smoke and Theft.

• Urban Mobility: Overcrowding violations, Speeding, Wrong way occurrences.


Figure 176: Alerts

Figure 177: Alerts Tray
The Alert panel appears displaying Severity Level, Alert Timespan, Alerts details for the selected module on the dashboard. You can view **Dismiss**, **Take Action**, **Update Severity**, and **More Info** in the right side of the dashboard to perform the following operations:

- **Dismiss**: You can use Dismiss to cancel an incident associated with alert.
- **Take Action**: You can use Take Action to select a Standard Operating Procedure to deal with alert.
- **Update Severity**: You can use Update Severity to modify the severity of incident associated with alert.
- **More Info**: You can expand More Info to view additional incident information associated with alert.

### Alarms: External Incidents

An **Alarm** identifies a significant incident that cannot be resolved within the CKC infrastructure. These notifications inform the Operator that some defined threshold values have been reached. For eg: Waste Bin battery percentage dropped, Fill level reached, Waste bin's temperature reached threshold value.

Currently Waste Management incidents generate alarms.

*Figure 178: Alarm*

---

### Viewing Unread System Messages

Any logged-in user can view system messages in the CKC Web GUI.

**Before you begin**

Log into the Cisco Kinetic for Cities as an operator.

---

**Step 1**

Find the Notifications (bell) icon in the upper-right corner of the banner at the top of the CKC Web GUI. If a number is superimposed on the Notifications icon, unread messages are available.
Step 2  Hover the mouse over the Notifications icon. The most recent unread messages appear beneath the bell icon, in menu-like fashion.

Once the notifications are viewed, the counter on the bell icon resets.

Step 3  To display the details of a specific unread message, click on it. The Notifications window displays the message.
What to do next

View, filter and sort all available messages. See Sorting and Filtering System Messages, on page 126

Sorting and Filtering System Messages

All system messages (notifications, alerts and alarms) are always visible from the Notifications view, which provides controls that you can use to sort and filter the messages that it displays.

Before you begin

Log in to the Cisco Kinetic for Cities.

Step 1

When unread notifications exist, hover the mouse pointer over the Notifications icon. A list of the most recent notifications appears.

If you do not choose an item from the list it disappears after a short time, and the Notifications icon resets its status (no numeral appears on the icon). Additionally, the list is cleared - no notifications appear when your mouse pointer hovers over the Notifications icon.

Step 2

Click an item in the pop-up list of notifications display the Notifications page.

The Notifications page appears.
You can also display the Notifications page at any time by clicking the empty notification that appears in the list when no unread notifications are pending.

**Step 3** Optionally, filter the display of system messages.

Choose one of the items from the pull-down menu at the left side of the banner on the Notifications page:

- **All**: show all system messages
- **Information**: show informational notifications only. Do not show Alerts or Alarms.
- **Alerts**: show Alerts only. Do not show informational notifications or Alarms.

**Step 4** Optionally, sort displayed items according to values that appear in a column that you choose.

Click a column heading to sort on that value. To reverse the sort order, click a second time on the same column heading.

The page displays the messages in the sort order you specified.

---

**What to do next**

Click an individual item to see more details or to access the workflow associated with it.
SOP

Standard Operating Procedure, or SOP, is a set of step-by-step instructions compiled by City Council, to help workers, operators, and agencies carry out complex routine operations without any ambiguity. SOPs aim to achieve efficiency, quality output and uniformity of performance, while reducing miscommunication and failure to comply with industry regulations.

You can use multiple unlimited SOPs to be created and mapped to different types of incidents so that the mapping are persistent. Dashboard provides control over alerts that happen within the region of focus. It allows operators to trigger appropriate SOPs as per type of the incidents enabling operator to be efficient in handling the incidents.

Every Workflow can be assigned to an Incident type. Whenever a system alert is raised for the selected Incident type, Operator can submit a Workflow against this Alert. This creates an Instance. An instance assigned to logged in operator's group appears in the Tasks tab.

- Workflows, on page 129
- Instances, on page 133
- Tasks, on page 137

Workflows

SOP supports workflow tasks that can have multiple level of approvals; multiple departments to contact, and automated escalation path of communication.

How SOP works?

1. Existing Workflow is mapped against an Incident. Details discussed in Assigning Incident Section below.

2. An Alerts gets generated in the system for the Incident mentioned in step 1. For details, refer Alerts: System-Actionable Incidents, on page 122

3. The raised Alert is mapped against one of the available workflows mentioned in step 1. Details discussed in Instances, on page 133 Section.

4. The available workflow is assigned to a group. This results in creation of an Instance. For details refer Instances, on page 133

5. The instance appears in the Tasks tab of the all the group members. For details refer, Tasks, on page 137

6. Any of the group member can act on the Instance, by completing, claiming, delegating or resolving. For details refer, Tasks, on page 137
7. After action is taken, the status of the Instance changes.

Viewing a Workflow Page

To view a workflow page, click the SOP tab on the dashboard. The Workflows page appears by default. The current version supports following workflows: send email, send notification, safety threat and parking violation. For information on Instance and Task, see Instances, on page 133 and Tasks, on page 137.

Information on the Workflows Page

Each entry on the Workflow page provides the following information about a workflow:

- **SOP**: The name of the SOP workflow.
- **Description**: Description of the workflow.
- **Category**: Category information of the workflow.
- **Number of Instances**: Number of instances running for the current workflow. For details on instances refer Instances, on page 133
- **Assign**: Allows the workflow to be mapped against an incident.

Viewing SOP Workflow

Follow the below steps to view the SOP Workflow description:
1. In the Workflows page, click the link below the SOP.

*Figure 183: Workflow Link*

![Workflow Link Image]

2. The Workflow dialog box appears. You can view the SOP Name, description and diagrammatic representation of the flow/process that would be followed in case of the occurrence of assigned incident alert i.e. Call, email etc

*Figure 184: Workflow Description*

![Workflow Description Image]

### Assigning Incident

Follow the below steps to assign incidents to the workflow:
1. In the Workflow page, click **Assign**.

   *Figure 185: Assigning Incident*

2. The Assign incidents dialog box appears. In this dialog box, select the check box to select the incidents to be assigned to the workflow.

   An Incident in CKC refer to event(s) that is of significance that requires explicit notification to users.

   **Note**
   The incidents type / Alerts supported in current version are listed in Alerts section. Please see Alerts: System-Actionable Incidents, on page 122

   *Figure 186: Assign Incidents Window*

3. Click **Save** to assign incidents to selected workflow.

4. Upon clicking save, the incident will be successfully assigned to the selected workflow.
Creating an Instance

On clicking the SOP tab on the dashboard, the Workflows page appears by default on the dashboard. For information on Workflows and Tasks, see Workflows, on page 129 and Tasks, on page 137

In order to create an instance, perform the following steps:

1. Go to Alerts page.
2. Click Take Action.
3. Select a Standard Operating Procedure from the available list of Workflows.
4. Click **Submit**.

5. Assign the SOP to any group.

   *Figure 190: Assigning the SOP to a group*

This creates an Instance in the SOP section.

Instances can also be created from Map View page. The Map view page also displays system generated Alerts with the option of **Take Action** as shown below. The same sequence of steps as mentioned above can be followed to create an instance.
Click the **Instances** tab. The Instances page appears on the dashboard.

**Information on the Instances Page**

Each entry on the Instance page provides the following information about an instance:

- **Instance**: Instance details such as task id.
- **Workflow**: Workflow type assigned for the selected instance in SOP.
- **Incident ID**: Incident id for selected instance in SOP.
- **Incident Name**: Incident name for selected instance in SOP.
- **Status**: Workflow instance status such as In Progress, Complete.

**Viewing Instances Status**

Follow the below steps to view the Instances status:
1. On the **Instances** page, click **task id** below the instance to view the instance status. You can also click **View** to see the **Instance Status** details.

   *Figure 193: View Instance*

   ![Instance Status](image)

2. The **Instance Status** screen appears. You can view the Task ID and Workflow instances status for SOP.

   *Figure 194: Instance Status*

   ![Instance Status](image)

---

**Filtering Workflow**

1. On the **Instances** page, click the Workflow drop-down to select the workflow.
2. Select or clear the check boxes depending on the Workflow you want to filter and view on Instances page. For example, we add a filter to the call and Emergency Notification. The new filter will be applied to preview the instance page based on the selected checkbox i.e. call and Emergency Notification.

Figure 196: View Instances Page

Tasks

Any instance that been assigned to the logged in Operator's group appears as a task in the Tasks tab. A task can have task information, workflow type, assignee group, and action details.
Viewing a Tasks Page

On clicking the SOP tab on the dashboard, the Workflows page appears by default on the dashboard. For information on Workflows and Instances, see Workflows, on page 129 and Instances, on page 133.

Click Tasks. The Tasks page appears.

Figure 197: Tasks Page

Information on the Task Page

Each entry on the Task page provides the following information about a task:

- **Task**: Task Id
- **Description**: Incident description and severity level of the task.
- **Workflow**: Workflow details for the selected task.
- **Assignee Group**: Group to which task is assigned.
- **Actions**: There is a list of actions that you can perform on task such as Complete, Claim, Delegate, and Resolve.

Viewing Task

Follow the below steps to view task description:

1. On the Tasks page, click the link present below the Task.
2. The **Actions** window appears. You can view actions that you can perform on task such as Complete, Claim, Delegate, and Resolve. for example, you can click **Complete**, when the action on the task is already completed, similarly you can click the Claim or Resolve button to claim or resolve the task.

3. Click **Delegate** and then select user from the drop-down to assign task to the selected user.
4. Go to Instances tab, the status for this Instance appears as **In Progress**

Or else, you can click on **Complete** button and then go to Instance tab to check Instance's status, which now changes to **Complete**.

---

**Figure 202: Instance Status Change**

<table>
<thead>
<tr>
<th>Incident ID</th>
<th>Incident Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBUPGADAAMPRHG6J2ND</td>
<td>SuspiciousObject</td>
<td>Complete</td>
</tr>
<tr>
<td>MBU50WXYAAAMPRPHG2AM5ZT</td>
<td>FireAndSmoke</td>
<td>In Progress</td>
</tr>
</tbody>
</table>
CHAPTER 8

Reports

CKC enables the customers to discover, compare, and correlate data across various domain to discover the patterns that were previously hidden. You can generate detailed Traffic, Parking, Lighting, Environment, Mobility etc reports on demand.

Few such reports are explained below:

- Generating Reports, on page 141
- Filtering Reports, on page 143
- Parking Reports, on page 144
- Lighting Reports, on page 146
- Environment Reports, on page 149
- Mobility Reports, on page 150

Generating Reports

The overall procedure for generating any type of report is as follows:

Before you begin

Log in to the CKC Web GUI in the Operator role.

Step 1

Choose Reports from the top navigation bar of the CKC Web GUI. The Reports page appears. If the user is accessing the Reports section for the first time, she is asked to provide the details for provisioning of data. The screen appears as shown below:
Step 2  Go to Advanced settings → Reports section as shown below

Step 3  Select the Module and the corresponding Report(s) that you want to configure.

Step 4  Click on Save

Step 5  Once the data is provisioned, Click on the Add Widget button present on top left corner. A list of all reports configured in the Advanced tab gets displayed.

Note  These configuration changes are stored in database and are accessible to other operators as well.
Step 7  Select all the reports that you want to see. A widget for each would get added to the screen.

Step 8  Click **Save Dashboard** located at top right corner of reports screen. This saves the added widgets.

**What to do next**

For more information, see the appropriate report detail topic.

**Filtering Reports**

All **Reports** provide controls that enable you to select the reporting data by time period and by location.
Setting the Reporting Period

Every detailed view of the report provides "From Date" and "To Date" filters to set the Reporting Period.

![Figure 206: Setting of time period](image)

Reports can be generated for specific city or for all cities over which logged in Operator has access. You can also select the Graph type in which the report should be generated.

![Figure 207: Setting Parking filters](image)

For Parking reports, additional filters of Parking Lots and Parking Spots can be applied.

Note that simply configuring the reporting-period controls does not generate a new report. To generate a report using current settings, click the **Update** button.

Reports can also be downloaded using the red colored hamburger button located on reports detailed view.

![Figure 208: Reports Download](image)

Parking Reports

If you need more parking details than the color-coded icons in Map View provide, you can generate the following reports on demand:
Occupancy Report: Hour-by-hour percentage parking occupancy for locations and dates that you specify.

Session Report: Number of parking sessions per week for locations and dates that you specify.

Turnover Report: Number of times parking changes hands per day for locations and dates that you specify.

Violations Report: Number of parking violations per day for locations and dates that you specify.

Revenue Report: The average revenue generated at a parking space over a specified time period.

For more information, see the appropriate report detail topic.

Parking Occupancy Report

The Parking Occupancy report provides hour-by-hour percentage occupancy for locations and dates that you specify.

Figure 209: Parking Occupancy Report

Viewing the Pie Chart

The report can also be viewed in pie chart form by selecting the Graph Type as "Pie Chart"

Figure 210: Pie Chart for Occupancy report
Parking Session Report

The Parking Session report provides the number of parking sessions per week for locations and dates that you specify.

Figure 211: Parking Session Report

Parking Turnover Report

The Parking Turnover report provides the number of times parking changes hands per day for locations and dates that you specify. Note that the default report groups turnover by weekdays, enabling you to compare the week-to-week variations on a particular day of the week easily.

Figure 212: Parking Turnover Report

Lighting Reports

Generate the following Lighting reports as needed for the location and date of your choice:

For more information on how to generate and filter the reports, see Generating Reports, on page 141 and Setting the Reporting Period, on page 144.

- **Lighting Intensity Report**: Shows the average brightness of lighting in percentage (%) for the location and date that you specify.
• **Lighting Energy Consumption Report**: Shows the average electrical energy consumed in kilowatt hour (kWh) for the location and date that you specify.

• **Lighting Energy Savings Report**: Shows the average electrical energy saved in kilowatt hour (kWh) for the location and date that you specify.

For more information, see the appropriate report detail topic.

**Lighting Intensity Report**

The Lighting Intensity report summarizes the average brightness of lighting in percentage (%) per day, week, month, or year for the specified location and date.

*Figure 213: Lighting Intensity Report*

---

**Lighting Energy Consumption Report**

The Lighting Energy Consumption report shows the average amount of electrical energy consumed in kilowatt hour (kWh) per day, week, month, or year for the specified location and date.
Hovering your mouse pointer over one of the bars in the report displays details about the reporting period that the bar represents.

**Lighting Energy Savings Report**

The Lighting Energy Savings report shows the average amount of electrical energy saved in kilowatt hour (kWh) per day, week, month, or year for the specified location and date.

Hovering your mouse pointer over one of the bars in the report displays details about the reporting period that the bar represents.
Environment Reports

Generate the following environment reports as needed for the location and date of your choice:

For more information on how to generate and filter the reports, see Generating Reports, on page 141 and Setting the Reporting Period, on page 144.

• **Carbon-di-oxide (CO\(_2\))**: Shows the average Carbon-di-oxide values in ppm at multiple point to interest that are sampled every minute for the day, week, month, or year.

• **Carbon monoxide (CO)**: Shows the average Carbon monoxide values in ppm at multiple point to interest that are sampled every minute for the day, week, month, or year.

• **Nitrogen-di-oxide (NO\(_2\))**: Shows the average Nitrogen-di-oxide values in ppm at multiple point of interest that are sampled every minute for the day, week, month, or year.

• **PM\(_2.5\)**: Shows the average PM\(_2.5\) values in \(\mu g/m^3\) at multiple point of interest that are sampled every minute for the day, week, month, or year.

• **Sulphur-di-oxide (SO\(_2\))**: Shows the average Sulphur-di-oxide values in ppm at multiple point of interest that are sampled every minute for the day, week, month, or year.

• **Ozone (O\(_3\))**: Shows the average Ozone values in ppm at multiple point of interest that are sampled every minute for the day, week, month, or year.

• **Temperature**: Shows the average temperature recorded in degree Celsius at multiple point of interest that are sampled every minute for the day, week, month, or year.

• **Noise**: Shows the average noise levels in decibels (dB) at multiple point of interest that are sampled every minute for the day, week, month, or year.

• **Lux**: Shows the average lux levels in decibels (dB) at multiple point of interest that are sampled every minute for the day, week, month, or year.

• **Humidity**: Shows the average humidity levels in percentage (%) at multiple point of interest that are sampled every minute for the day, week, month, or year.

The legend displayed at the bottom right corner of the report indicates whether the air quality is good or unhealthy. Green color indicates that the air quality is Good and Red color indicates that the air quality is unhealthy.

Hovering the mouse pointer over one of the bars in any of the above reports displays details about the reporting period that the bar represents.

The following figure shows the monthly average carbon-di-oxide report.
Mobility Reports

Generate the following Mobility reports as needed for the City and date of your choice:

For more information on how to generate and filter the reports, see Generating Reports, on page 141 and Setting the Reporting Period, on page 144.

- **Pedestrians Count**: Shows the average people count per minute at multiple point to interest for the day, week, month, or year.

- **Vehicles Count**: Shows the average count of vehicles at multiple point of interest that are sampled every minute, and averaged hourly for the day, week, month, or year.

- **Dwell Time**: Shows the average people dwell time at multiple point to interest that are sampled every minute for the day, week, month, or year.

Hovering the mouse pointer over one of the bars in any of the above reports displays details about the reporting period that the bar represents.

Few such reports are shown below:

**Figure 217: Mobility Report - Average Vehicle Count Trend**
Other Reports

You can generate few more type of reports using CKC Dashboard:

<table>
<thead>
<tr>
<th>Safety and Security</th>
<th>Overcrowding</th>
<th>The total number of overcrowding reports at a point of interest.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intrusion Violation</td>
<td>The average intrusion incidents at a given time at a point of interest.</td>
</tr>
<tr>
<td></td>
<td>Object Detection</td>
<td>The total number of times an object is created.</td>
</tr>
<tr>
<td></td>
<td>Direction Violation</td>
<td>The average number of incidents pertaining to vehicles moving in the wrong direction.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Visitors</th>
<th>Visitors First Count</th>
<th>The average number of new visitors at a point of interest.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Visitors Repeat Count</td>
<td>The average number of repeat visitors at a point of interest.</td>
</tr>
<tr>
<td></td>
<td>Visitors Bounce count</td>
<td>The average number of visitors who walk away from a point of interest due to overcrowding.</td>
</tr>
<tr>
<td>Waste Management</td>
<td>Fill Levels of Bin</td>
<td>The average bin fill levels over a specified period of time.</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Temperature Level</td>
<td>The average temperature of the waste bins over a specified period of time.</td>
</tr>
<tr>
<td></td>
<td>Fill Range</td>
<td>The average number of bins with the specified fill levels.</td>
</tr>
<tr>
<td></td>
<td>Fill Levels vs Temperature of Bin</td>
<td>Cross vertical report that plots fill level of a bin against the temperature of the bin.</td>
</tr>
</tbody>
</table>
CHAPTER 9

Video Wall

You can view live video feeds for various locations using the Video Wall section. The video cameras placed at multiple locations stream live video feeds as per the layout defined by the user. You can view detailed information about each feed, capture screen shot, record specific clipping.

• Using Video Wall Section, on page 153

Using Video Wall Section

You can edit the layout of displayed feeds, record the clippings and take screen shots.

Before you begin

Login to the dashboard as an operator.

Step 1

Select Video Wall from the top navigation menu of the dashboard. All the accessible video feeds get displayed. Below figure displays a portion of the Video Wall section.

Figure 219: A portion of Video Wall page
Using Video Wall Section

Step 2 Click on the Grid size on top right of the page.

*Grid size* indicates the number of records to be displayed in a single row

Selecting size as '3' displays first three records in first row.

*Figure 220: Video Wall page with Grid Size 3*

Step 3 Click **Extract** present on top right of the page.
The entire Video Wall section is extracted to an adjacent tab of the browser.

Step 4 Click **Edit Layout**

An interface gets displayed where user can drag camera from the right side panel and drop into the left grid.

*Figure 221: Customize Camera Layout*

Step 5 Drag a camera from the right panel

*DROP HERE* gets displayed at all the available locations on the left panel.

Step 6 Release the selected camera at the desired location.

Positioning of feeds display can be rearranged by crossing out an existing camera position and then again dropping the same into a new location.
Taking action on individual feed

Each camera feed has few control buttons which enables the user to perform specific actions.

Step 1
Click present on bottom left of the feed.
The details of the feed such as Name, Location and Video URL are displayed as shown here
Step 2  Click
The detailed view of the feed opens up in an adjacent tab. This view allows the user to control the focus of the displayed feed.

*Figure 223: Video Wall Camera Controls*

Step 3  Click
A destination folder 'CiscoKinetic' should be created in c: drive of the system prior to taking the snapshot.
A snapshot of the current feed is captured and gets stored in the created destination folder. A success message is displayed.

*Figure 224: Successful message for saved image*

Step 4  Click
A destination folder 'CiscoKinetic' should be created in c: drive of the system prior to recording the feed.
Recording of the feed begins

Step 5  Click again
Recording of the feed stops and gets saved in the destination folder. A success message gets displayed when the video file gets saved.

*Figure 225: Saved Video Success message*
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